```
Cys Ser Asp Thr Ser Leu Asn Glu Leu Leu Phe Ala Ile Cys Gly
    195
                 200
Phe Ile Gln Thr Ala Thr Val Leu Ala Ile Thr Val Ser Tyr Gly Phe
                    215
                                           220
Ile Ala Gly Ala Val Ile His Met Arg Ser Val Glu Gly Ser Arg Arg
                   230
                                       235
Ala Ala Ser Thr Gly Gly Ser His Leu Thr Ala Val Ala Met Met Tyr
                245
                                250
Gly Thr Leu Ile Phe Met Tyr Leu Arg Pro Ser Ser Ser Tyr Ala Leu
            260
                               265
                                                   270
Asp Thr Asp Lys Met Ala Ser Val Phe Tyr Thr Leu Val Ile Pro Ser
                           280
                                              285
Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Glu Ala
                       295
Leu Arg Gln Thr Trp Ser Arg Phe His Cys Pro Gly Gln
                    310
<210> 1912
<211> 316
<212> PRT
<213> Unknown (H38g830 protein)
<220>
<223> Synthetic construct
<221> VARIANT
<222> (1)...(316)
<223> Xaa = Any Amino Acid
<400> 1912
Met Val Ile Leu Ser Trp Glu Asn Gln Thr Met Arg Val Glu Phe Val
                5
                                   10
Leu Gln Gly Phe Ser Ser Ile Arg Gln Leu Asn Ile Phe Leu Phe Met
           20
                               25
Ile Ile Leu Val Phe Tyr Ile Leu Thr Val Ser Gly Asn Ile Leu Ile
                           40
                                               45
Val Leu Leu Val Leu Val Arg His His Leu His Thr Pro Met Tyr Phe
Leu Leu Val Asn Leu Ser Cys Leu Glu Ile Trp Tyr Thr Ser Asn Ile
                   70
Ile Pro Lys Met Leu Leu Ile Ile Ile Ala Glu Xaa Lys Thr Ile Ser
               85
                                   90
Val Ala Gly Trp Leu Ala Gln Phe Tyr Phe Phe Gly Ser Leu Ala Ala
           100
                               105
                                                   110
Thr Glu Cys Leu Leu Thr Val Met Ser Tyr Asp Arg Tyr Leu Ala
                          120
                                              125
```

185 Met Asp Thr Ser Val Thr Glu Thr Ile Ala Phe Ala Thr Ser Ser Ala 200 205 Val Thr Leu Ile Pro Phe Leu Leu Ile Val Ala Ser Tyr Ser Cys Val 215 220

Ile Cys Gln Pro Leu Cys Tyr Arg Val Leu Met Thr Gly Pro Leu Cys

Ile Arg Leu Ala Ala Gly Ser Trp Phe Cys Cys Phe Leu Leu Thr Ala

Ile Thr Met Val Leu Leu Cys Arg Leu Thr Phe Cys Gly Pro Tyr Glu

Thr Asp His Phe Phe Cys Asp Phe Thr Pro Leu Val His Leu Ser Cys

135

150

165

Leu Ser Ala Ile Leu Arg Ile Pro Ser Cys Thr Gly Gln Lys Lys Ala 230 235

Phe Ser Thr Cys Ser Ser His Leu Thr Val Val Ile Val Phe Tyr Gly

140

155

170

```
245
                                    250
 Thr Leu Ile Ala Thr Tyr Leu Val Pro Ser Ala Asn Ser Ser Gln Leu
            260
                                265
 Leu Cys Lys Gly Ser Ser Leu Leu Tyr Ile Ile Leu Thr Pro Met Phe
        275
                            280
 Asn Pro Ile Ile Tyr Ser Leu Arg Asn Arg Asp Ile His Glu Ala Leu
                       295
Lys Lys Cys Leu Arg Lys Lys Ser Gly Val Cys Leu
           4 310
<210> 1913
<211> 309
<212> PRT
<213> Unknown (H38g831 protein)
<220>
<223> Synthetic construct
<221> VARIANT
<222> (1)...(309)
<223> Xaa = Any Amino Acid
<400> 1913
Glu Xaa Met Gly Thr Ser Asn Asn Val Thr Glu Phe Val Leu Pro Gly
                                    10
Leu Ser Gln Asp Pro Asp Val Gln Lys Ala Leu Phe Val Met Phe Leu
            20
                                25
Leu Thr Tyr Asn Val Thr Met Val Gly Asn Leu Leu Ile Val Val Thr
                            40
Ile Ile Ala Ile Ala Ser Leu Asp Ser Pro Val Ser Phe Phe Leu Ala
                        55
Cys Leu Ser Phe Ile Asp Ala Val Tyr Ser Thr Ser Phe Ser Pro Lys
                    70
                                        75
Leu Met Ile Asp Leu Leu Cys Asp Lys Lys Thr Val Ser Phe Leu Ala
                85
                                    90
Cys Met Gly Gln Leu Phe Ile Asn Tyr Pro Phe Gly Gly Ile Glu Val
           100
                                105
Phe Leu Leu Val Gly Met Ala Cys Asp His Tyr Val Asp Ile Cys Lys
                            120
                                                125
Leu Leu His Tyr Leu Thr Ile Met Asn Trp Gln Val Cys Ile Leu Leu
                        135
                                            140
Phe Met Val Ala Val Thr Gly Gly Phe Leu His Ser Met Phe Gln Ile
                    150
                                        155
Val Val Tyr Ser Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His
                165
                                    170
Phe Cys Asp Met Tyr Pro Leu Leu Glu Met Val Cys Thr Asp Thr Tyr
           180
                                185
Phe Ile Gly Leu Thr Val Ile Ala Asn Gly Gly Ala Val Cys Met Val
                            200
                                                205
Ile Phe Ile Leu Leu Ile Ser Tyr Gly Val Ile Leu Asn Ser Leu
                        215
                                            220
Lys Thr Tyr Ser Gln Glu Gly Gly His Lys Ala Leu Ser Thr Cys Ser
                    230
                                        235
Ser Asn Ile Thr Val Val Ser Leu Phe Phe Asp Pro Cys Ile Phe Ile
                                    250
Tyr Val Arg Pro Asp Ser Asn Phe Pro Ile Asp Lys Phe Met Thr Val
                               265
Phe Tyr Thr Ile Ile Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu
                           280
Arg Asn Leu Glu Val Arg Ile Ala Val Lys Asn Leu Trp Cys Lys Asn
                        295
                                            300 ·
```

```
Xaa Thr Ile Val Arg
305
<210> 1914
<211> 318
<212> PRT
<213> Unknown (H38g832 protein)
<220>
<223> Synthetic construct
<221> VARIANT
<222> (1)...(318)
<223> Xaa = Any Amino Acid
<400> 1914
Met Asp Arg Val Asn Asn Ser Ala Val Ser Lys Phe Val Leu Ile Gly
                      10
       5
Leu Ser Ser Ser Trp Glu Met His Pro Phe Leu Phe Trp Phe Phe Ser
                              25
Val Phe Tyr Met Gly Ile Ile Leu Glu Asn Leu Phe Ile Val Phe Thr
    35
                          40
                                             45
Val Ile Ile Asp Ser His Leu Asn Ser Pro Val Tyr Cys Leu Leu Ala
                    55
Asn Ile Tyr Leu Leu Asp Leu Val Phe Ser Tyr Ser Ser Asp Phe Phe
                  70
                                      75
Thr Asn Cys Ser Ile Ile Ser Phe Pro Arg Cys Met Ile Gln Ile Phe
                                  90
Phe Ile Cys Val Met Arg Lys Ile Glu Met Val Leu Leu Ile Thr Met
                                                  110
                              105
Ala Xaa Ser Arg Tyr Thr Ala Ile Cys Lys Pro Pro His Tyr Leu Thr
                                              125
                          120
Thr Met Asn Pro Lys Met Cys Val Ser Leu Leu Glu Ala Ser Trp Ile
                      135
                                          140
Val Arg Ile Ile His Ala Val Ser Gln Phe Val Phe Ala Ile Asn Leu
                  150
                                      155
Pro Phe Cys Gly Pro Asn Arg Val Gly Ser Phe His Cys Asp Phe Pro
                                 170
              165
Tyr Val Met Lys Leu Ala Cys Val Asp Thr Tyr Lys Leu Glu Val Val
                              185
                                                  190
           180
Val Thr Ala Asn Ser Gly Leu Ile Ser Ile Ala Thr Cys Phe Leu Leu
      195
                          200
                                              205
Ile Ile Ser Tyr Ile Phe Ile Ser Val Thr Val Xaa Asn Pro Ser Ser
                                          220
                       215
Gly Asp Leu Ser Lys Ala Phe Val Ser Cys Ser Asp His Ile Thr Val
                                      235
                   230
Gly Ile Leu Phe Phe Met Pro Cys Ile Phe Leu Tyr Val Xaa Pro Leu
                                  250
               245
Pro Lys Thr Thr His Asp Xaa Tyr Leu Phe Ile Val Pro Leu Leu Ser
                                                 270
                              265
Pro Leu Ser Arg Ile Tyr Thr Leu Arg Asn Lys Asp Met Asn Val Ser
                         280
                                              285
Met Glu Arg Leu Gly Lys Trp Ile Ala Gly Ser Ser Arg Met Ser Xaa
                                          300
                      295
Xaa Met Val Leu Ser Arg Val Gln Asp Asp Ser Val Ser Pro
                   310
                                      315
<210> 1915
<211> 309
<212> PRT
<213> Unknown (H38g833 protein)
```

```
<220>
<223> Synthetic construct
<400> 1915
Met Glu Gly Ile Asn Lys Thr Ala Lys Met Gln Phe Phe Arg Pro
                                  10
Phe Ser Pro Asp Pro Glu Val Gln Met Leu Ile Phe Val Val Phe Leu
                              25
        20
Met Met Tyr Leu Thr Ser Leu Gly Gly Asn Ala Thr Ile Ala Val Ile
                                             45
                          40
Val Gln Ile Asn His Ser Leu His Thr Pro Met Tyr Phe Phe Leu Ala
                                      60
                      55
Asn Leu Ala Val Leu Glu Ile Phe Tyr Thr Ser Ser Ile Thr Pro Leu
                                      75
                  70
Ala Leu Ala Asn Leu Leu Ser Met Gly Lys Thr Pro Val Ser Ile Thr
                                  90
              85
Gly Cys Gly Thr Gln Met Phe Phe Phe Val Phe Leu Gly Gly Ala Asp
                              105
          100
Cys Val Leu Leu Val Val Met Ala Tyr Asp Arg Phe Ile Ala Ile Cys
                           120
His Pro Leu Arg Tyr Arg Leu Ile Met Ser Trp Ser Leu Cys Val Glu
                       135
                                          140
Leu Leu Val Gly Ser Leu Val Leu Gly Phe Leu Leu Ser Leu Pro Leu
                   150
                                       155
Thr Ile Leu Ile Phe His Leu Pro Phe Cys His Asn Asp Glu Ile Tyr
                                   170
His Phe Tyr Cys Asp Met Pro Ala Val Met Arg Leu Ala Cys Ala Asp
                               185
Thr Arg Val His Lys Thr Ala Leu Tyr Ile Ile Ser Phe Ile Val Leu
                           200
        195
Ser Ile Pro Leu Ser Leu Ile Ser Ile Ser Tyr Val Phe Ile Val Val
                                          220
                       215
Ala Ile Leu Arg Ile Arg Ser Ala Glu Gly Arg Gln Gln Ala Tyr Ser
                  230
                                      235
Thr Cys Ser Ser His Ile Leu Val Val Leu Leu Gln Tyr Gly Cys Thr
                                  250
Ser Phe Ile Tyr Leu Ser Pro Ser Ser Ser Tyr Ser Pro Glu Met Gly
                                                  270
                              265
           260
Arg Val Val Ser Val Ala Tyr Thr Phe Ile Thr Pro Ile Leu Asn Pro
     275 280
Leu Ile Tyr Ser Leu Arg Asn Lys Glu Leu Lys Asp Ala Leu Arg Lys
                                          300
                      295
Ala Leu Arg Lys Phe
305
<210> 1916
<211> 329
<212> PRT
<213> Unknown (H38g834 protein)
<223> Synthetic construct
<221> VARIANT
<222> (1)...(329)
<223> Xaa = Any Amino Acid
<400> 1916
Asp Ser Val Asp Gln Val Asn Asp Ser Leu Val Thr Glu Phe Val Leu
                                   10
```

```
Leu Gly Leu Ala Gln Ser Leu Glu Met Gln Phe Phe Leu Phe Leu Phe
                               25
Phe Ser Leu Phe Tyr Val Gly Ile Ile Leu Gly Asn Leu Phe Ile Val
                           40
Phe Thr Val Ile Phe Asp Pro His Leu His Ser Pro Met Tyr Ile Leu
                       55
Leu Ala Asn Leu Ser Leu Ile Asp Leu Ser Leu Ser Ser Thr Thr Val
Pro Arg Leu Ile Tyr Asp Leu Phe Thr Asp Cys Lys Val Ile Ser Phe
               85
                                   90
His Asn Cys Met Ile Gln Lys Phe Phe Ile His Val Thr Gly Gly Val
                              105
           100
Glu Met Val Leu Leu Ile Val Met Ala Tyr Asp Arg Tyr Thr Ala Ile
                                              125
                           120
      115
Cys Lys Pro Leu His Tyr Pro Thr Ile Met Asn Pro Lys Met Cys Met
                       135
                                          140
Phe Leu Val Ala Ala Ala Trp Val Ile Gly Val Ile His Ala Met Ser
                                       155
                   150
Gln Phe Val Phe Val Ile Asn Leu Pro Phe Cys Gly Pro Asn Asn Val
               165
                                   170
Gly Ser Phe Tyr Cys Asp Phe Pro Arg Val Ile Lys Leu Ala Cys Met
           180
                               185
                                                   190
Asp Thr Tyr Gly Leu Glu Phe Val Val Thr Ala Asn Ser Gly Phe Ile
                                               205
       195
                           200
Ser Met Gly Thr Phe Phe Phe Leu Ile Val Ser Tyr Ile Phe Ile Leu
                       215
                                           220
Val Thr Val Gln Arg His Ser Ser Asn Asp Leu Ser Lys Ala Phe Phe
                   230
                                       235
Thr Ser Xaa Ala His Ile Thr Val Val Val Leu Phe Phe Ala Pro Cys
                                   250
               245
                     ,
Met Phe Leu Tyr Val Trp Pro Phe Pro Thr Lys Ser Leu Asp Lys Phe
                               265
                                                   270
           260
Phe Ala Ile Met Asn Phe Val Val Thr Pro Val Leu Asn Pro Ala Ile
                                              285
       275
                          280
Tyr Thr Leu Arg Asn Lys Asp Met Lys Phe Ala Met Arg Arg Leu Asn
                      295
Gln His Ile Leu Asn Ser Met Glu Met Thr Xaa His Ile Trp Leu Met
                  310
                                       315
Arg Ala Gln Asp Lys Cys His Gly Pro
               325
```

```
<210> 1917
```

<220>

<223> Synthetic construct

<221> VARIANT

<222> (1)...(257)

<223> Xaa = Any Amino Acid

<400> 1917

 Ser Met Tyr
 Phe Phe Leu Thr Asn Phe Ala Gly Leu Glu Ile Phe Tyr

 1
 5
 10
 15

 Phe Phe Thr Ile Ala Pro Leu Thr Leu Ala Asn Val Leu Pro Met Gly
 20
 25
 30

 Arg Asn Leu Ile Ser Leu Pro Gly Cys Gly Gly Gln Met Phe Phe
 35
 40
 45

 Ile Phe Leu Gly Arg Ala Asp Cys Ile Leu Leu Ala Val Met Ala Phe

<sup>&</sup>lt;211> 257

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Unknown (H38g835 protein)

```
60
Asp Trp Phe Val Ala Ile Cys Cys Pro Leu Cys Tyr Gly Leu Ile Met
                                       75
                    70
Ser Trp Arg Leu Cys Val Gln Leu Thr Leu Gly Ser Leu Leu Leu Gly
                                   90
Phe Phe Leu Ala Met Gln Leu Thr Val Leu Ile Phe Gln Leu Pro Leu
                                105
Cys Ser Ser Lys Glu Ile Ser Thr Phe Tyr Cys Asp Val Leu Pro Val
                                                125
                           120
Met Arg Leu Ala Cys Ala Asp Thr Trp Val His Glu Ala Thr Met Ser
                                           140
                       135
Met Val Ser Thr Thr Phe Leu Thr Val Pro Phe Leu Leu Ile Thr Leu
                                       155
                   150
Ser Tyr Val Ser Ile Met Ala Ala Ile Leu Lys Ile Cys Ser Ala Glu
                                   170
                165
Gly Arg His Lys Ala Phe Ser Thr Cys Ser Ser His Leu Thr Val Val
                                                   190
                               185
           180
Leu Leu Gln Asp Xaa Cys Thr Arg Leu Ala Phe Leu Cys Pro Ser Ser
                                                205
                           200
       195
Ser Tyr Tyr Pro Glu Arg Gly Gln Ala Val Ser Val Val Tyr Thr Phe
                                            220
                       215
Ile Thr Pro Val Leu Asn Pro Leu Ile Tyr Ser Met Arg Asn Thr Glu
                                       235
                   230
Leu Lys Asp Ala Leu Lys Arg Ala Met Thr Arg Val Pro Leu Leu Xaa
                                    250
<210> 1918
<211> 305
<212> PRT
<213> Unknown (H38g836 protein)
<220>
<223> Synthetic construct
<400> 1918
Met Val Thr Glu Phe Ile Phe Leu Gly Leu Ser Asp Ser Gln Glu Leu
1
Gln Thr Phe Leu Phe Met Leu Phe Phe Val Phe Tyr Gly Gly Ile Val
                                25
Phe Gly Asn Leu Leu Ile Val Ile Thr Val Val Ser Asp Ser His Leu
                                                45
                            40
His Ser Pro Met Tyr Phe Leu Leu Ala Asn Leu Ser Leu Ile Asp Leu
                                            60
                        55
Ser Leu Ser Ser Val Thr Ala Pro Lys Met Ile Thr Asp Phe Phe Ser
                                        75
                    70
Gln Arg Lys Val Ile Ser Phe Lys Gly Cys Leu Val Gln Ile Phe Leu
                                    90
                85
Leu His Phe Phe Gly Gly Ser Glu Met Val Ile Leu Ile Ala Met Gly
                                                    110
            100
                                105
Phe Asp Arg Tyr Ile Ala Ile Cys Lys Pro Leu His Tyr Thr Thr Ile
                                                125
                            120
Met Cys Gly Asn Ala Cys Val Gly Ile Met Ala Val Ala Trp Gly Ile
                        135
                                            140
Gly Phe Leu His Ser Val Ser Gln Leu Ala Phe Ala Val His Leu Pro
                                        155
                    150
Phe Cys Gly Pro Asn Glu Val Asp Ser Phe Tyr Cys Asp Leu Pro Arg
                                    170
Val Ile Lys Leu Ala Cys Thr Asp Thr Tyr Arg Leu Asp Ile Met Val
                                185
```

```
Ile Ala Asn Ser Gly Val Leu Thr Val Cys Ser Phe Val Leu Leu Ile
                          200
Ile Ser Tyr Thr Ile Ile Leu Met Thr Ile Gln His Cys Pro Leu Asp
                       215
Lys Ser Ser Lys Ala Leu Ser Thr Leu Thr Ala His Ile Thr Val Val
                                       235
                   230
Leu Leu Phe Phe Gly Pro Cys Val Phe Ile Tyr Ala Trp Pro Phe Pro
                                   250
Ile Lys Ser Leu Asp Lys Phe Leu Ala Val Phe Tyr Ser Val Ile Thr
                               265
           260
Pro Leu Leu Asn Pro Ile Ile Tyr Thr Leu Arg Asn Lys Asp Met Lys
                          280
    275
Thr Ala Ile Arg Arg Leu Arg Lys Trp Asp Ala His Ser Ser Val Lys
305
<210> 1919
<211> 318
<212> PRT
<213> Unknown (H38g837 protein)
<223> Synthetic construct
<221> VARIANT
<222> (1)...(318)
<223> Xaa = Any Amino Acid
<400> 1919
Met Asp Arg Val Asn Asn Ser Ala Val Ser Lys Phe Val Leu Ile Gly
                                    10
Leu Ser Ser Ser Trp Glu Met His Leu Phe Leu Phe Trp Phe Phe Ser
                                                   30
           20
Val Phe Tyr Met Gly Ile Ile Leu Glu Asn Leu Phe Ile Val Phe Thr
      35
                           40
Val Ile Ile Asp Ser His Leu Asn Ser Pro Val Tyr Cys Leu Leu Ala
                       55
Asn Ile Tyr Leu Leu Asp Leu Val Phe Ser Tyr Ser Ser Asp Phe Phe
                                       75
                   70
Thr Asn Cys Ser Ile Ile Ser Phe Pro Arg Cys Met Ile Gln Ile Phe
                                   90
               85
Phe Ile Cys Val Met Arg Lys Ile Glu Met Val Leu Leu Ile Thr Met
                                                   110
                               105
           100
Ala Xaa Ser Arg Tyr Thr Ala Ile Cys Lys Pro Pro His Tyr Leu Thr
                           120
                                               125
Thr Met Asn Pro Lys Met Cys Val Ser Leu Leu Glu Ala Ser Trp Ile
                                           140
                       135
Val Arg Ile Ile His Ala Val Ser Gln Phe Val Phe Ala Ile Asn Leu
                   150
                                       155
Pro Phe Cys Gly Pro Asn Arg Val Gly Ser Phe His Cys Asp Phe Pro
                                   170
Tyr Val Met Lys Leu Ala Cys Val Asp Thr Tyr Lys Leu Glu Val Val
                                                   190
                               185
Val Thr Ala Asn Ser Gly Leu Ile Ser Ile Ala Thr Cys Phe Leu Leu
                           200
                                               205
Ile Ile Ser Tyr Ile Phe Ile Ser Val Thr Val Xaa Asn Pro Ser Ser
                       215
                                           220
Gly Asp Leu Ser Lys Ala Phe Val Ser Cys Ser Asp His Ile Thr Val
                   230
                                       235
Gly Ile Leu Phe Phe Met Pro Cys Ile Phe Leu Tyr Val Xaa Pro Leu
```

```
250
                245
Pro Lys Thr Thr His Asp Xaa Tyr Leu Phe Ile Val Pro Leu Leu Ser
                                265
            260
Pro Leu Ser Arg Ile Tyr Thr Leu Arg Asn Lys Asp Met Asn Val Ser
                            280
                                                285
Met Glu Arg Leu Gly Lys Trp Ile Ala Gly Ser Ser Arg Met Ser Xaa
                       295
                                            300
Xaa Met Val Leu Ser Arg Val Gln Asp Asp Ser Val Ser Pro
                   310
<210> 1920
<211> 328
<212> PRT
<213> Unknown (H38g838 protein)
<220>
<223> Synthetic construct
<221> VARIANT
<222> (1)...(328)
<223> Xaa = Any Amino Acid
<400> 1920
Leu Ser Ile Cys Phe Phe Leu Cys Ile Phe Ser Ala Asp Ile Xaa Ser
Met Leu Ala Met Glu Gln Asn Asn Gly Thr Glu Val Thr Glu Phe Ile
Leu Leu Gly Phe Ala Gly Gln His Lys Ser Trp His Ile Leu Ser Ile
                            40
Ala Phe Leu Ala Ile Tyr Val Val Thr Pro Val Gly Asn Ile Gly Met
                        55
                                            60
Ile Leu Leu Ile Lys Ile Asp Ala Ser Leu His Ile Pro Met Xaa Ile
                    70
                                        75
Phe Leu Gln His Leu Ala Phe Val Asp Leu Cys Tyr Thr Ser Ala Ile
                85
                                    90
Thr Pro Lys Met Leu Lys Asn Phe Val Glu Thr Lys Lys Ser Ile Ser
                                105
Cys Ile Gly Cys Met Val Gln Leu Leu Val Tyr Gly Thr Phe Ala Thr
                           120
                                                125
Ser Asp Cys Tyr Ile Leu Ala Ala Met Ala Val Asp Arg Tyr Val Ala
                       135
                                            140
Phe Cys Asn Pro Leu His Tyr Pro Gly Val Met Ser Gln Arg Leu Cys
                   150
                                        155
Ile Lys Leu Leu Val Ser Ser Tyr Val Met Gly Phe Leu Asn Ala Ser
               165
                                    170
Ile Asn Ile Ser Phe Thr Phe Ser Leu Asn Phe Cys Lys Ser Lys Thr
            180
                                185
Ile Asn His Phe Phe Cys Asp Glu Pro Pro Ile Ile Ala Leu Pro Cys
                            200
Ser Asn Ile Asp Leu Asn Ile Met Leu Leu Thr Val Phe Val Gly Leu
                        215
                                            220
Asn Leu Met Cys Thr Val Met Val Val Ile Ile Ser Cys Ile Tyr Val
                    230
                                        235
Leu Val Ala Ile Leu Arg Ile Ser Ser Ala Ala Gly Lys Lys Ser
               245
                                    250
Leu Ser Thr Cys Ala Ser His Leu Thr Ala Val Thr Ile Phe Tyr Gly
           260
                                265
Val Leu Ser Tyr Met Tyr Leu Cys His Arg Ile Asn Glu Ser Gln Lys
                           280
                                                285
Gln Glu Lys Val Ala Ser Val Phe Tyr Gly Ile Ile Ile Pro Met Leu
                        295
```

```
Asn Pro Leu Ile Tyr Ser Gln Arg Asn Gln Asp Val Ile Glu Ala Ile
                   310
305
Lys Leu Thr Glu Lys Lys Tyr Phe
               325
<210> 1921
<211> 338
<212> PRT
<213> Unknown (H38g839 protein)
<220>
<223> Synthetic construct
<221> VARIANT
<222> (1)...(338)
<223> Xaa = Any Amino Acid
<400> 1921
Met Ile Ser Phe Leu Val Pro Gly Leu Met Glu Glu Glu Asn Gln Arg
Gly Val Val His Phe His Phe His Phe Phe Ser Thr Asp Leu Val Val
                               25
Ala Ser Phe Ile Ile Val Ala Leu Met Leu His Leu Arg Ser Leu Val
                                               45
                           40
Gly His Phe Thr Phe Gly Pro Thr Val Trp Gln Asp Pro Phe Leu His
                       55
Ile Pro Met Tyr Leu Phe Leu Phe Ser Leu Ala Leu Thr Met Leu Glu
                   70
                                       75
Ile Gly Tyr Ser Thr Asn Ile Ser Pro Pro Thr Leu Ala Thr Val Leu
                                   90
               85
Tyr Met Gly Lys Met Leu Ile Ser Leu Pro Gly Tyr Gly Thr Gln Met
                               105
Leu Phe Val Ile Leu Leu Arg Gly Ser Glu Cys Val Leu Leu Ala Val
                           120
                                               125
Met Ala Tyr Asp Arg Tyr Ile Thr Ile Cys His Pro Phe Asn Tyr Asn
                       135
                                           140
Leu Ile Met Ser Gly Xaa Leu Cys Gly Gln Met Thr Leu Gly Ser Leu
                                       155
                   150
Arg Leu Gly Phe Leu Leu Ser Leu Phe Leu Thr Met Leu Ile Xaa His
                                   170
Pro Pro Phe Cys Gly Leu Asp Glu Thr Tyr His Phe Phe Cys Asp Met
                                                   190
                               185
           180
Pro Thr Ala Ser Arg Leu Val Cys Ala Asp Thr Thr Val His Glu Ser
                                               205
                           200
Ala Leu Xaa Leu Pro Cys Gly His His His His Pro Leu Pro Ser Ser
                                           220
                       215
Leu Ile Cys Leu Pro Tyr Gly Cys Leu Ala Ala Thr Ile Leu Arg Met
                                       235
                   230
His Ser Ala Lys Arg Lys His Xaa Ala Phe Ser Thr Ser Ser His
               245
                                    250
Leu Ile Val Val Leu Leu Lys Tyr Trp Cys Cys Ile Leu Ile Cys Leu
                                265
                                                    270
Cys Pro Ser Ser Ser Tyr Ser Pro Glu Glu Gly Trp Glu Val Ser Leu
                                               285
                           280
Val His Met Phe Ile Leu Pro Val Trp Asn Pro Leu Ile Tyr Ser Val
                       295
                                           300
Trp Asn Gln Asp Val Thr Asp Ala Val Glu Arg Leu Val Ala Arg Met
                   310
                                       315
Ser Leu Val Leu Thr Ala Arg Asn Ile Pro Ser Xaa Lys Ile Phe Pro
               325
                                    330
Xaa Leu
```

```
<210> 1922
<211> 329
<212> PRT
<213> Unknown (H38g840 protein)
<220>
<223> Synthetic construct
<221> VARIANT
<222> (1)...(329)
<223> Xaa = Any Amino Acid
<400> 1922
Asp Ser Val Asp Gln Val Asn Asp Ser Leu Val Thr Glu Phe Val Leu
                                    10
Leu Gly Leu Ala Gln Ser Leu Glu Met Gln Phe Phe Leu Phe Leu Phe
Phe Ser Leu Phe Tyr Val Gly Ile Ile Leu Gly Asn Leu Phe Ile Val
                            40
Phe Thr Val Ile Phe Asp Pro His Leu His Ser Pro Met Tyr Ile Leu
                        55
                                            60
Leu Ala Asn Leu Ser Leu Ile Asp Leu Ser Leu Ser Ser Thr Thr Val
                    70
                                        75
Pro Arg Leu Ile Tyr Asp Leu Phe Thr Asp Cys Lys Val Ile Ser Phe
                85
                                    90
His Asn Cys Met Ile Gln Lys Phe Phe Ile His Val Thr Gly Gly Val
                                105
                                                    110
Glu Met Val Leu Leu Ile Val Met Ala Tyr Asp Arg Tyr Thr Ala Ile
                            120
                                                125
Cys Lys Pro Leu His Tyr Pro Thr Ile Met Asn Pro Lys Met Cys Met
                        135
                                            140
Phe Leu Val Ala Ala Ala Trp Val Ile Gly Val Ile His Ala Met Ser
                    150
                                        155
Gln Phe Val Phe Val Ile Asn Leu Pro Phe Cys Gly Pro Asn Asn Val
                                    170
Gly Ser Phe Tyr Cys Asp Phe Pro Arg Val Ile Lys Leu Ala Cys Met
                                185
Asp Thr Tyr Gly Leu Glu Phe Val Val Thr Ala Asn Ser Gly Phe Ile
                            200
Ser Met Gly Thr Phe Phe Leu Ile Val Ser Tyr Ile Phe Ile Leu
                       215
                                           220
Val Thr Val Gln Arg His Ser Ser Asn Asp Leu Ser Lys Ala Phe Phe
                                       235
                   230
Thr Ser-Xaa Ala His Ile Thr Val Val Leu Phe Phe Ala Pro Cys
                                    250
               245
Met Phe Leu Tyr Val Trp Pro Phe Pro Thr Lys Ser Leu Asp Lys Phe
           260
                                265
Phe Ala Ile Met Asn Phe Val Val Thr Pro Val Leu Asn Pro Ala Ile
                            280
                                                285
Tyr Thr Leu Arg Asn Lys Asp Met Lys Phe Ala Met Arg Arg Leu Asn
                       295
                                           300
Gln His Ile Leu Asn Ser Met Glu Met Thr Xaa His Ile Trp Leu Met
                   310
                                        315
Arg Ala Gln Asp Lys Cys His Gly Pro
               325
<210> 1923
<211> 245
<212> PRT
```

1104

```
<213> Unknown (H38g841 protein)
<220>
<223> Synthetic construct
<221> VARIANT
<222> (1)...(245)
 <223> Xaa = Any Amino Acid
<400> 1923
Met Gln Ser Glu His Leu Ala Glu Phe Ser Glu Phe Leu Ile Leu Ser
                                   10
Leu Ser Glu Ile Gln Asn Cys Ser Pro Phe Phe Gly Leu Phe Leu Ser
                                25
Met Asn Leu Val Thr Val Leu Gly Asn Leu Leu Ile Ile Leu Ala Ile
                           40
Ser Ser Asp Ser His Leu His Lys Pro Met Tyr Phe Leu Leu Ser Lys
                       55
Leu Ser Met Ala Ala Ile Cys Phe Val Phe Thr Met Ile Gln Lys Met
                   70 r 75
Met Val Asn Leu Arg Ala Gln Ser Lys Asp Ile Phe Thr Gln Pro Ser
                85
                                    90
Gly Ser Pro Ile Pro Phe Xaa Met Cys Ser Leu Ile Arg Phe Leu Leu
                                105
Ile Gln Gln Lys Ser Val Val Leu Ile Phe Glu Tyr Ser Arg Phe Xaa
        115
                            120
                                                125
Phe Ser Tyr Leu Asn Leu Lys Met Xaa Thr Asn Tyr Ser Phe Val Xaa
                       135
                                            140
Ala Phe Gln Asn Asn Xaa Arg Gln Leu Cys Pro Phe Leu Asp Asn His
                   150
                                       155
His Thr Phe Phe Thr Leu Ile Asp Thr Gln Leu Leu Ile Ser His Gly
                                   170
Phe Ser Thr Gln Thr Thr Phe Ile Leu Ser Ser Tyr Ala Ser Gly Tyr
           180
                               185
Ala Thr Val Asp Ser Gln Cys Phe Ile Tyr Phe Leu Asn Met Met Ile
       195
                           200
                                               205
Thr Ile Asn Leu Phe Val Arg Phe Lys Asn Ile Phe Met His Ser Ser
                       215
                                           220
Ile Ser Ile Asn Tyr Asn Tyr Tyr Phe Lys Lys Xaa Asn Lys Gly Gly
                    230
                                        235
Ile Tyr Glu Ile Tyr
               245
<210> 1924
<211> 305
<212> PRT
<213> Unknown (H38g842 protein)
<220>
<223> Synthetic construct
<400> 1924
Met Val Thr Glu Phe Ile Phe Leu Gly Leu Ser Asp Ser Gln Glu Leu
                                   10
Gln Thr Phe Leu Phe Met Leu Phe Phe Val Phe Tyr Gly Gly Ile Val
           20
Phe Gly Asn Leu Leu Ile Val Ile Thr Val Val Ser Asp Ser His Leu
                           40
His Ser Pro Met Tyr Phe Leu Leu Ala Asn Leu Ser Leu Ile Asp Leu
                       55
                                    ե 6′0
Ser Leu Ser Ser Val Thr Ala Pro Lys Met Ile Thr Asp Phe Phe Ser
```

```
70
                                         75
Gln Arg Lys Val Ile Ser Phe Lys Gly Cys Leu Val Gln Ile Phe Leu
                                    90
Leu His Phe Phe Gly Gly Ser Glu Met Val Ile Leu Ile Ala Met Gly
                                105
Phe Asp Arg Tyr Ile Ala Ile Cys Lys Pro Leu His Tyr Thr Thr Ile
                            120
                                                 125
Met Cys Gly Asn Ala Cys Val Gly Ile Met Ala Val Ala Trp Gly Ile
                        135
Gly Phe Leu His Ser Val Ser Gln Leu Ala Phe Ala Val His Leu Pro
                    150
                                        155
Phe Cys Gly Pro Asn Glu Val Asp Ser Phe Tyr Cys Asp Leu Pro Arg
                165
                                    170
Val Ile Lys Leu Ala Cys Thr Asp Thr Tyr Arg Leu Asp Ile Met Val
            180
                                185
Ile Ala Asn Ser Gly Val Leu Thr Val Cys Ser Phe Val Leu Leu Ile
        195
                            200
                                                 205
Ile Ser Tyr Thr Ile Ile Leu Met Thr Ile Gln His Arg Pro Leu Asp
                        215
                                            220
Lys Ser Ser Lys Ala Leu Ser Thr Leu Thr Ala His Ile Thr Val Val
                    230
                                        235
Leu Leu Phe Phe Gly Pro Cys Val Phe Ile Tyr Ala Trp Pro Phe Pro
                245
                                    250
Ile Lys Ser Leu Asp Lys Phe Leu Ala Val Phe Tyr Ser Val Ile Thr
                                265
Pro Leu Leu Asn Pro Ile Ile Tyr Thr Leu Arg Asn Lys Asp Met Lys
                            280
Thr Ala Ile Arg Arg Leu Arg Lys Trp Asp Ala His Ser Ser Val Lys
                        295
Phe
305
<210> 1925
<211> 309
<212> PRT
<213> Unknown (H38g843 protein)
<220>
<223> Synthetic construct
<400> 1925
Met Ala Ala Gly Asn His Ser Thr Val Thr Glu Phe Ile Leu Lys Gly
                                    10
Leu Thr Lys Arg Ala Asp Leu Gln Leu Pro Leu Phe Leu Phe Leu
Gly Ile Tyr Leu Val Thr Ile Val Gly Asn Leu Gly Met Ile Thr Leu
Ile Cys Leu Asn Ser Gln Leu His Thr Pro Met Tyr Tyr Phe Leu Ser
                        55
Asn Leu Ser Leu Met Asp Leu Cys Tyr Ser Ser Val Ile Thr Pro Lys
                                        75
Met Leu Val Asn Phe Val Ser Glu Lys Asn Ile Ile Ser Tyr Ala Gly
                85
                                    90
Cys Met Ser Gln Leu Tyr Phe Phe Leu Val Phe Val Ile Ala Glu Cys
            100
                                105
Tyr Met Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
                            120
Pro Leu Leu Tyr Asn Ile Ile Met Ser His His Thr Cys Leu Leu Leu
                       135
                                            140
Val Ala Val Val Tyr Ala Ile Gly Leu Ile Gly Ser Thr Ile Glu Thr
                                        155
```

```
Gly Leu Met Leu Lys Leu Pro Tyr Cys Glu His Leu Ile Ser His Tyr
               165
                                  170
Phe Cys Asp Ile Leu Pro Leu Met Lys Leu Ser Cys Ser Ser Thr Tyr
                               185
           180
Asp Val Glu Met Thr Val Phe Phe Ser Ala Gly Phe Asn Ile Ile Val
                                               205
       195
                           200
Thr Ser Leu Thr Val Leu Val Ser Tyr Thr Phe Ile Leu Ser Ser Ile
                       215
                                           220
Leu Gly Ile Ser Thr Thr Glu Gly Arg Ser Lys Ala Phe Ser Thr Cys
                                       235
                   230
Ser Ser His Leu Ala Ala Val Gly Met Phe Tyr Gly Ser Thr Ala Phe
                                   250
               245
Met Tyr Leu Lys Pro Ser Thr Ile Ser Ser Leu Thr Gln Glu Asn Val
                               265
           260
Ala Ser Val Phe Tyr Thr Thr Val Ile Pro Met Leu Asn Pro Leu Ile
                                               285
                           280
Tyr Ser Leu Arg Asn Lys Glu Val Lys Ala Ala Val Gln Lys Thr Leu
                       295
Arg Gly Lys Leu Phe
305
<210> 1926
<211> 310
<212> PRT
<213> Unknown (H38g844 protein)
<223> Synthetic construct
<400> 1926
Met Ala Ala Lys Asn Ser Ser Val Thr Glu Phe Ile Leu Glu Gly Leu
                                    10
Thr His Gln Pro Gly Leu Arg Ile Pro Leu Phe Phe Leu Phe Leu Gly
                                25
                                                   30
Phe Tyr Thr Val Thr Val Val Gly Asn Leu Gly Leu Ile Thr Leu Ile
                                               45
                           40
       35
Gly Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Phe Asn
                                           60
                       55
Leu Ser Leu Ile Asp Phe Cys Phe Ser Thr Thr Ile Thr Pro Lys Met
                                       75
                   70
Leu Met Ser Phe Val Ser Arg Lys Asn Ile Ile Ser Phe Thr Gly Cys
                                   90
               85
Met Thr Gln Leu Phe Phe Phe Cys Phe Phe Val Val Ser Glu Ser Phe
                                                   110
                                105
Ile Leu Ser Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro
                           120
                                               125
Leu Leu Tyr Thr Val Thr Met Ser Cys Gln Val Cys Leu Leu Leu
                                           140
                       135
Leu Gly Ala Tyr Gly Met Gly Phe Ala Gly Ala Met Ala His Thr Gly
                                       155
                   150
Ser Ile Met Asn Leu Thr Phe Cys Ala Asp Asn Leu Val Asn His Phe
                                    170
Met Cys Asp Ile Leu Pro Leu Leu Glu Leu Ser Cys Asn Ser Ser Tyr
                                                   190
           180
                               185
Met Asn Glu Leu Val Val Phe Ile Val Val Ala Val Asp Val Gly Met
                           200
                                               205
       195
Pro Ile Val Thr Val Phe Ile Ser Tyr Ala Leu Ile Leu Ser Ser Ile
                                           220
                       215
Leu His Asn Ser Ser Thr Glu Gly Arg Ser Lys Ala Phe Ser Thr Cys
                   230
                                       235
Ser Ser His Ile Ile Val Val Ser Leu Phe Phe Gly Ser Gly Ala Phe
```

```
250
                245
Met Tyr Leu Lys Pro Leu Ser Ile Leu Pro Leu Glu Gln Gly Lys Val
            260
                               265
Ser Ser Leu Phe Tyr Thr Ile Ile Val Pro Val Leu Asn Pro Leu Ile
                           280
                                                285
Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Ala Leu Arg Arg Thr Leu
                       295
Gly Arg Lys Ile Phe Ser
<210> 1927
<211> 157
<212> PRT
<213> Unknown (H38g845 protein)
<220>
<223> Synthetic construct
<221> VARIANT
<222> (1)...(157)
<223> Xaa = Any Amino Acid
<400> 1927
Met Gly Glu Ala Arg Asn Arg Thr Val Val Gln Glu Phe Ile Leu Glu
                                    10
Gly Phe Pro Ala Val Gln His Leu Gly Asn Val Leu Phe Leu Val His
                                25
Leu Leu Ala Tyr Leu Ala Ser Ile Met Ala Asn Met Leu Ile Ile Thr
                            40
Ile Thr Trp Ala Asp His His Leu Gln Thr Pro Met Tyr Phe Phe Leu
                        55
Ser Ser Phe Ser Phe Cys Glu Cys Cys Phe Ile Thr Thr Val Ile Pro
                   70
                                        75
Lys Leu Leu Val Ile Leu Leu Ser Gly Arg Ala Lys Ile Pro Leu Ser
                                    90
               85
Thr Thr Leu Ser His Ala Val Pro Phe Ser Phe Leu Tyr Ser Trp Val
                                105
Asn Ser Phe Ser Ser Leu Asn Gly Cys Asp Val Pro Leu Asp Xaa Tyr
                           120
                                                125
Leu Ala Ile Cys Lys Pro Leu His Tyr Ser Thr Ile Met Ser Leu Arg
                       135
                                           140
Thr Ser Phe His Lys Val Thr Ala Trp Leu Cys Pro Gly
                   150
<210> 1928
<211> 333
<212> PRT
<213> Unknown (H38g846 protein)
<220>
<223> Synthetic construct
<221> VARIANT
<222> (1)...(333)
<223> Xaa = Any Amino Acid
<400> 1928
Thr Asp Pro Gln Asn Leu Thr Thr Asp Val Ser Ile Phe Leu Val Leu
               5
                                   10
Glu Leu Ser Glu Asp Pro Glu Leu Gln Pro Val Leu Ala Gly Leu Phe
                               25
            20
```

```
Leu Ser Met Cys Leu Val Met Val Leu Gly Asn Leu Leu Ile Ile Leu
                            40
Ala Val Ser Pro Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu
                                           60
Ser Asn Leu Ser Leu Pro Asp Ile Gly Phe Thr Ser Thr Met Val Pro
                   70
                                       75
Lys Met Ile Val Asp Ile Gln Ser His Ser Arg Leu Ile Ser Tyr Ala
                                   90
               85
Gly Cys Leu Thr Gln Met Ser Leu Phe Ala Ile Phe Gly Gly Met Glu
                               105
          100
Glu Asn Met Leu Leu Ser Val Met Ala Tyr Asp Arg Phe Val Ala Ile
                           120
                                               125
       115
Cys His Pro Leu Tyr Tyr Ser Ala Ile Met Asn Pro Cys Phe Cys Gly
                       135
                                           140
Phe Leu Val Leu Leu Ser Cys Cys Leu Ser Leu Leu Asp Ser Gln Leu
                                       155
                  150
His Asn Leu Ile Ala Leu Gln Ile Thr Cys Phe Lys Asp Val Glu Ile
               165
                                   170
Pro Asn Phe Phe Trp Asp Pro Ser Gln Leu Pro His His Ala Cys Cys
           180
                               185
Asp Thr Phe Thr Asn Asn Ile Val Met Tyr Phe Pro Ala Ala Ile Phe
                                               205
                           200
       195
Gly Phe Leu Pro Thr Ser Gly Ile Leu Phe Ser Tyr Tyr Lys Ile Val
                                           220
                       215
Ser Ser Ile Leu Arg Val Ser Ser Ser Gly Gly Asn Tyr Lys Ala Leu
                                       235
                   230
Ser Ala Cys Gly Ser His Leu Ser Val Val Cys Leu Phe Tyr Gly Thr
                                   250
               245
Gly Val Gly Gly Tyr Leu Ser Ser Asp Val Ser Ser Ser Pro Arg Lys
                               265
                                                  270
Gly Ala Val Ala Ser Val Met Tyr Thr Val Val Thr Pro Met Leu Asn
                                               285
                           280
       275
Pro Phe Ile Tyr Ser Leu Arg Asn Arg Asp Ile Lys Ser Val Leu Arg
                                           300
                       295
Arg Leu His Gly Arg Thr Val Xaa Ser Gln Tyr Leu Ile Ile Cys Ser
                  310
                                      315
Ile Pro Phe Val Val Trp Val Xaa Lys Gly Ser Lys Val
               325
```

<210> 1929

<211> 222

<212> PRT

<213> Unknown (H38g847 protein)

<220>

<223> Synthetic construct

<400> 1929

Ser Gln Leu Ser Leu Met Asp Leu Met Leu Ile Cys Thr Thr Leu Pro 10 Lys Met Ile Phe Ser Tyr Leu Ser Gly Lys Lys Ser Ile Ser Leu Ala 20 25 Gly Cys Gly Thr Gln Ile Phe Phe Tyr Val Ser Leu Leu Gly Ala Glu 40 45 Cys Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys 55 60 His Pro Leu Gln Tyr Thr Ile Leu Met Asn Pro Glu Leu Cys Val Phe 70 75 Met Thr Val Ala Ser Trp Thr Leu Gly Ser Leu Asp Gly Ile Ile Val 90 85

Leu Ala Ala Val Leu Ser Phe Ser Tyr Cys Ser Ser Leu Glu Ile His

----

```
105
           100
His Phe Phe Cys Asp Val Ala Ala Leu Leu Pro Leu Ser Cys Thr Glu
                          120
Thr Ser Ala Phe Glu Arg Leu Leu Val Ile Cys Cys Val Val Met Leu
                                          140
                       135
Ile Phe Pro Val Ser Val Ile Ile Leu Ser Tyr Ser His Val Leu Arg
                                       155
                  150
Ala Val Ile His Met Gly Ser Gly Glu Ser Arg Arg Lys Ala Phe Thr
                                   170
               165
Thr Cys Ser Ser His Pro Ser Val Val Gly Leu Tyr Tyr Gly Ala Ala
                               185
                                                  190
          180
Met Phe Met Tyr Met Arg Pro Ala Ser Lys His Thr Pro Asp Gln Asp
                                           205
                          200
Lys Met Val Ser Ala Phe Tyr Thr Asn Leu Thr Pro Met Leu
                       215
<210> 1930
<211> 114
<212> PRT
<213> Unknown (H38g848 protein)
<220>
<223> Synthetic construct
<221> VARIANT
<222> (1)...(114)
<223> Xaa = Any Amino Acid
<400> 1930
Leu Ala Cys Ile Val Gly Xaa Lys Phe Ala Phe Ile Ile Ser Pro Asn
                                   10
                5
His His Phe Met Ile Met Val Thr Phe Ile Leu Val Asn Ile Xaa Lys
                               25
            20
His Ser Ser Gly Asn Leu Ser Ser Ala Leu Ile Ile Leu Phe Ile Phe
                                               45
                            40
       35
Ile Pro Val Val Ser Leu Phe Phe Thr Pro Cys Val Val Leu Tyr Val
                       55
                                           60
Trp Pro Thr Leu Pro Pro Ser Leu Asp Lys Asn Met Phe Ile Val Asp
                                       75
                   70
Phe Val Val Asn Pro Val Leu Lys Pro Ala Thr Tyr Ile Leu Gln Asn
                                  90
               85
Lys Asp Ile Lys Val Ala Leu Xaa Asn Leu His Glu Lys Arg Thr Tyr
                              105
            100
Ser Ser
<210> 1931
<211> 305
<212> PRT
<213> Unknown (H38g849 protein)
<220>
<223> Synthetic construct
<400> 1931
Met Val Thr Glu Phe Ile Phe Leu Gly Leu Ser Asp Ser Gln Gly Leu
                                   10
Gln Thr Phe Leu Phe Met Leu Phe Phe Val Phe Tyr Gly Gly Ile Val
                               25
     . 20
Phe Gly Asn Leu Leu Ile Val Ile Thr Val Val Ser Asp Ser His Leu
                           40
        35
```

```
His Ser Pro Met Tyr Phe Leu Leu Ala Asn Leu Ser Leu Ile Asp Leu
                       55
Ser Leu Ser Ser Val Thr Ala Pro Lys Met Ile Thr Asp Phe Phe Ser
                   70
Gln Arg Lys Val Ile Ser Phe Lys Gly Cys Leu Val Gln Ile Phe Leu
                                    90
               85
Leu His Phe Phe Gly Gly Ser Glu Met Val Ile Leu Ile Ala Met Gly
                                105
           100
Phe Asp Arg Tyr Ile Ala Ile Cys Lys Pro Leu His Tyr Thr Thr Ile
                                               125
                           120
Met Cys Gly Asn Ala Cys Val Gly Ile Met Ala Val Ala Trp Gly Ile
                                           140
                       135
Gly Phe Leu His Ser Val Ser Gln Leu Ala Phe Ala Val His Leu Pro
                                        155
                  150
Phe Cys Gly Pro Asn Glu Val Asp Ser Phe Tyr Cys Asp Leu Pro Arg
               165
                                   170
Val Ile Lys Leu Ala Cys Thr Asp Thr Tyr Arg Leu Asp Ile Met Val
                                                    190
                               185
Ile Ala Asn Ser Gly Val Leu Thr Val Cys Ser Phe Val Leu Leu Ile
                            200
       195
Ile Ser Tyr Thr Ile Ile Leu Met Thr Ile Gln His Arg Pro Leu Asp
                       215
                                            220
Lys Ser Ser Lys Ala Leu Ser Thr Leu Thr Ala His Ile Thr Val Val
                   230
                                        235
Leu Leu Phe Phe Gly Pro Cys Val Phe Ile Tyr Ala Trp Pro Phe Pro
                                    250
               245
Ile Lys Ser Leu Asp Lys Phe Leu Ala Val Phe Tyr Ser Val Ile Thr
                                265
Pro Leu Leu Asn Pro Ile Ile Tyr Thr Leu Arg Asn Lys Asp Met Lys
                           280
                                              285
Thr Ala Ile Arg Gln Leu Arg Lys Trp Asp Ala His Ser Ser Val Lys
                      295
Phe
305
<210> 1932
<211> 223
<212> PRT
<213> Unknown (H38g850 protein)
<220>
<223> Synthetic construct
<221> VARIANT
<222> (1)...(223)
<223> Xaa = Any Amino Acid
<400> 1932
Ser Asn Leu Ser Leu Pro Asp Ile Gly Phe Pro Ser Pro Thr Val Pro
Lys Met Val Val Asp Ile Gln Ser His Ser Arg Ser Phe Ser Tyr Ala
                                25
Gly Cys Leu Thr Gln Met Ser Leu Phe Ala Ile Phe Gly Gly Met Glu
                            40
Glu Thr Leu Leu Leu Asn Val Met Ala Tyr Val Arg Phe Val Ala Ile
                                            60
                       55
Cys His Pro Leu Tyr His Ser Ala Ile Met Asn Pro Cys Phe Cys Gly
                                        75
                   70
Phe Leu Leu Leu Ser Phe Phe Phe Leu Ser Leu Leu Asp Ala Gln
                                    90
Leu His Asn Leu Ile Ala Leu Gln Met Thr Cys Phe Lys Asp Val Glu
```

```
105
Ile Pro Asn Phe Leu Cys Asp Pro Ser Pro Leu Pro His Leu Ala Cys
                           120
                                                125
Cys Asp Thr Phe Thr Asn Asn Ile Ile Met Tyr Phe Pro Ala Ala Ile
                       135
Phe Gly Phe Leu Pro Ile Ser Gly Thr Leu Phe Ser Tyr Tyr Lys Ile
                   150
                                        155
Val Ser Ser Ile Leu Arg Val Ser Ser Ser Gly Gly Lys Tyr Lys Ala
               165
                                   170
Phe Ser Thr Cys Gly Ser His Leu Ser Val Val Cys Xaa Phe Tyr Gly
            180
                               185
                                                    190
Thr Gly Val Gly Gly Tyr Leu Gly Ser Asp Val Ser Ser Ser Pro Arg
                           200
                                                205
Lys Ser Ala Val Ala Ser Val Met Tyr Thr Val Val Thr Pro Met
                        215
<210> 1933
<211> 329
<212> PRT
<213> Unknown (H38g851 protein)
<220>
<223> Synthetic construct
<221> VARIANT
<222> (1)...(329)
<223> Xaa = Any Amino Acid
<400> 1933
Asp Ser Val Asp Gln Val Asn Asp Ser Leu Val Thr Glu Phe Val Leu
                                    10
Leu Gly Leu Ala Gln Ser Leu Glu Met Gln Phe Phe Leu Phe Leu Phe
                                25
Phe Ser Leu Phe Tyr Val Gly Ile Ile Leu Gly Asn Leu Phe Ile Val
                            40
Phe Thr Val Ile Phe Asp Pro His Leu His Ser Pro Met Tyr Ile Leu
                        55
                                            60
Leu Ala Asn Leu Ser Leu Ile Asp Leu Ser Leu Ser Ser Thr Thr Val
                    70
                                        75
Pro Arg Leu Ile Tyr Asp Leu Phe Thr Asp Cys Lys Val Ile Ser Phe
                85
                                    90
His Asn Cys Met Ile Gln Lys Phe Phe Ile His Val Thr Gly Gly Val
                                105
                                                    110
Glu Met Val Leu Leu Ile Val Met Glu Tyr Asp Arg Tyr Thr Ala Ile
                            120
Cys Lys Pro Leu His Tyr Pro Thr Ile Met Asn Pro Lys Met Cys Met
                        135
                                            140
Phe Leu Val Ala Ala Ala Trp Val Ile Gly Val Ile His Ala Met Ser
                   150
                                        155
Gln Phe Val Phe Val Ile Asn Xaa Pro Phe Cys Gly Pro Asn Asn Val
               165
                                    170
Gly Ser Phe Tyr Cys Asp Phe Pro Arg Val Ile Lys Leu Ala Cys Met
                               185
Asp Thr Tyr Gly Leu Glu Phe Val Val Thr Ala Asn Ser Gly Phe Ile
                           200
                                                205
Ser Met Gly Thr Phe Phe Phe Leu Ile Val Ser Tyr Ile Phe Ile Leu
                       215
                                            220
Val Thr Val Gln Arg His Ser Ser Asn Asp Leu Ser Lys Ala Phe Phe
                   230
                                       235
Thr Ser Xaa Ala His Ile Thr Val Val Val Leu Phe Phe Ala Pro Cys
                                    250
```

```
Met Phe Leu Tyr Val Trp Pro Phe Pro Thr Lys Ser Leu Asp Lys Phe
            260
                                 265
 Phe Ala Ile Met Asn Phe Val Val Thr Pro Val Leu Asn Pro Ala Ile
                             280
 Tyr Thr Leu Arg Asn Lys Asp Met Lys Phe Ala Met Arg Arg Leu Asn
                        295
                                            300
 Gln His Ile Leu Asn Ser Met Glu Thr Thr Xaa His Ile Trp Leu Met
                 310
                                        315
Arg Ala Gln Asp Lys Cys His Gly Pro
<210> 1934
 <211> 220
<212> PRT
<213> Unknown (H38g852 protein)
<220>
<223> Synthetic construct
<400> 1934
Ser Val Leu Ser Ile Ser Glu Thr Tyr Tyr Thr Val Ala Ile Asn Pro
                                 10
Gln Met Leu Ser Gly Leu Leu Ser Pro Gln Gln Thr Ile Ser Ile Pro
            20
                                25
Gly Cys Ala Ala Gln Leu Phe Phe Tyr Leu Thr Phe Gly Val Asn Lys
                         40
                                                45
Cys Phe Leu Leu Thr Ala Met Gly Tyr Asp His Tyr Val Ala Ile Cys
                       55
Asn Pro Leu Gln Tyr Ser Val Ile Met Gly Lys Lys Ala Cys Ile Gln
                    70
                                        75
Leu Val Ser Gly Ser Trp Asn Ile Gly Leu Ser Thr Ala Ile Ile Gln
                85
                                   90
Val Ser Ser Val Phe Ser Leu Pro Phe Cys Asp Ala Asn Leu Ile Ser
           100
                                105
His Phe Phe Cys Asp Ile Arg Pro Ile Met Lys Leu Ala Cys Ala Asp
                            120
                                                125
Thr Thr Ile Lys Glu Phe Ile Thr Leu Leu Ile Ser Leu Cys Val Leu
                        135
                                            140
Val Leu Pro Met Val Leu Ile Phe Ile Ser Tyr Val Leu Ile Val Thr
                   150
                                        155
Thr Ile Leu Lys Ile Ala Ser Ala Glu Gly Arg Arg Lys Ala Phe Ala
               165 .
                                   170
Thr Cys Ala Ser His Leu Thr Val Val Ile Val His Tyr Gly Arg Thr
                               185
Ser Phe Ile Tyr Leu Lys Pro Lys Ser Gln Asn Ser Leu Gln Asp Arg
                          200
Leu Ile Ser Val Thr Tyr Thr Val Ile Thr Pro Leu
                       215
<210> 1935
<211> 313
<212> PRT
<213> Unknown (H38g853 protein)
<220>
<223> Synthetic construct
<400> 1935
Met Ser Thr Ser Asn His Thr Gln Phe His Pro Ser Ser Phe Leu Leu
                                   10
Leu Gly Ile Pro Gly Leu Glu Asp Val His Ile Trp Ile Gly Val Pro
```

```
Phe Phe Val Tyr Leu Val Ala Leu Leu Gly Asn Thr Ala Leu Leu
Phe Val Ile Gln Thr Glu Gln Ser Leu His Glu Pro Met Tyr Tyr Phe
Leu Ala Met Leu Asp Ser Ile Asp Leu Gly Leu Ser Thr Ala Thr Ile
Pro Lys Met Leu Gly Ile Phe Trp Phe Asn Thr Lys Glu Ile Ser Phe
                                    90
Gly Gly Cys Leu Ser His Met Phe Phe Ile His Phe Phe Thr Ala Met
            100
                                105
                                                    110
Glu Ser Ile Val Leu Val Ala Met Ala Phe Asp Arg Tyr Ile Ala Ile
                            120
                                                125
Cys Lys Pro Leu Arg Tyr Thr Met Ile Leu Thr Ser Lys Ile Ile Ser
                       135
                                            140
Leu Ile Ala Gly Ile Ala Val Leu Arg Ser Leu Tyr Met Val Val Pro
                   150
                                        155
Leu Val Phe Leu Leu Arg Leu Pro Phe Cys Gly His Arg Ile Ile
               165
                                    170
Pro His Thr Tyr Cys Glu His Met Gly Ile Ala Arg Leu Ala Cys Ala
            180
                                185
Ser Ile Lys Val Asn Ile Arg Phe Gly Leu Gly Asn Ile Ser Leu Leu
                           200
Leu Leu Asp Val Ile Leu Ile Ile Leu Ser Tyr Val Arg Ile Leu Tyr
                       215
                                            220
Ala Val Phe Cys Leu Pro Ser Trp Glu Ala Arg Leu Lys Ala Leu Asn
                    230
                                        235
Thr Cys Gly Ser His Ile Gly Val Ile Leu Ala Phe Phe Thr Pro Ala
                245
                                    250
Phe Phe Ser Phe Leu Thr His Arg Phe Gly His Asn Ile Pro Gln Tyr
                                265
Ile His Ile Ile Leu Ala Asn Leu Tyr Val Val Val Pro Pro Ala Leu
                            280
Asn Pro Val Ile Tyr Gly Val Arg Thr Lys Gln Ile Arg Glu Arg Val
                        295
Leu Arg Ile Phe Leu Lys Thr Asn His
                    310
<210> 1936
<211> 295
<212> PRT
<213> Unknown (H38g854 protein)
<220>
<223> Synthetic construct
<221> VARIANT
<222> (1)...(295)
<223> Xaa = Any Amino Acid
<400> 1936
Tyr Met Ile Thr Ile Leu Trp Glu Ile Ser Lys Pro Val Asn Asn Ile
                                    10
Phe Leu Thr Leu Ser Val Arg Tyr Gln Met Leu Ile Thr Thr Val Ser
            20
                                25
Xaa Leu Xaa Met Lys Ser Ile Ile Xaa Ile Tyr Xaa Ser Phe Ser Glu
                            40
Tyr Leu Met Ser Xaa Lys Ile Trp Glu His Met Xaa Tyr Cys Ala Cys
Ile Asn Met Asp Lys Val Ser Glu Val Phe Ser Glu His Leu Phe Gly
                   70
                                        75
```

```
Ala Ala Glu Ile Ile Pro Leu Met Gly Met Val His Gly Cys Tyr Val
                                    90
                85
Thr Ile Cys Thr Ala Xaa Asn Ile Met Thr Gln Tyr Arg Cys Gly His
                               105
                                                    110
Leu Ala Gly Met Ala Cys Thr Gly Arg Phe Ile His Gly Thr Val Xaa
                                                125
                           120
Ile Leu Ser Pro Val Xaa Leu Pro Phe Tyr Asn Ser Asn Val Thr Ile
                                            140
                       135
Xaa Ile Ala His Phe Ile Cys Asp Leu Asn Thr Leu Leu Lys Leu Leu
                                        155
                   150
Cys Ile Gly Ser His Asp Thr Leu Gly Leu Phe Val Ala Ala Asn Asp
                                    170
               165
Gly Phe Asn Cys Leu Leu Asn Ile Ile Phe Leu Met Val Ser Xaa Val
                               185
           180
Ala Ile Leu Tyr Thr Leu Lys Ser His Ser Leu Glu Glu Arg Tyr Lys
                           200
Ala Leu Ser Thr Cys Val Ser His Thr Thr Val Ala Ile Xaa Phe Phe
                       215
                                            220
Val Phe Cys Ile Leu Val Tyr Leu Cys Pro Val Thr Leu Leu Pro Val
                                        235
                   230
Ser Lys Ala Val Ala Val Leu Tyr Thr Met Ile Thr Pro Thr Leu Asn
                                    250
               245
Pro Leu Val Tyr Thr Leu Arg Asn Ala Glu Val Lys Ser Val Glu Lys
                                265
Leu Leu Gly Gln Lys Met Thr Xaa Arg Glu Lys Xaa Ser Lys His Lys
                           280
       275
Met Ile Leu Leu Phe Gln Trp
   290
<210> 1937
<211> 309
<212> PRT
<213> Unknown (H38g855 protein)
<220>
<223> Synthetic construct
<400> 1937
Met Glu Lys Lys Lys Asn Val Thr Glu Phe Ile Leu Ile Gly Leu Thr
                                    10
Gln Asn Pro Ile Met Glu Lys Val Thr Phe Val Val Phe Leu Val Leu
                               25
           20
Tyr Met Ile Thr Leu Ser Gly Asn Leu Leu Ile Val Val Thr Ile Thr
                           40
      35
Thr Ser Gln Ala Leu Ser Ser Pro Met Tyr Phe Phe Leu Thr His Leu
                        55
                                            60
Ser Leu Ile Asp Thr Val Tyr Ser Ser Ser Ser Ala Pro Lys Leu Ile
                                        75
                   70
Val Asp Ser Phe Gln Glu Lys Lys Ile Ile Ser Phe Asn Gly Cys Met
                                    90
Ala Gln Ala Tyr Ala Glu His Ile Phe Gly Ala Thr Glu Ile Ile Leu
                               105
                                                    110
Leu Thr Val Met Ala Cys Asp Cys Tyr Val Ala Ile Cys Lys Pro Leu
                           120
                                                125
Asn Tyr Thr Thr Ile Met Ser His Ser Leu Cys Ile Leu Leu Val Ala
```

135

150

165

Val Ala Trp Val Gly Gly Phe Leu His Ala Thr Ile Gln Ile Leu Phe

Thr Val Trp Leu Pro Phe Cys Gly Pro Asn Val Ile Gly His Phe Met

Cys Asp Leu Tyr Pro Leu Leu Lys Leu Val Cys Ile Asp Thr His Thr

170

140

155

```
180
                                185
Leu Gly Leu Phe Val Ala Val Asn Ser Gly Phe Ile Cys Leu Leu Asn
                           200
                                              205
       195
Phe Leu Ile Leu Val Val Ser Tyr Val Ile Ile Leu Arg Ser Leu Lys
                       215
                                           220
Asn Asn Ser Leu Glu Gly Arg Cys Lys Ala Leu Ser Thr Cys Ile Ser
                   230
                                       235
His Ile Ile Val Val Leu Phe Phe Val Pro Cys Ile Phe Val Tyr
               245
                                   250
Leu Arg Ser Val Thr Thr Leu Pro Ile Asp Lys Ala Val Ala Val Phe
                              265
Tyr Thr Met Val Val Pro Met Leu Asn Pro Val Val Tyr Thr Leu Arg
                                           285
                          280
Asn Ala Glu Val Lys Ser Ala Ile Arg Lys Leu Trp Arg Lys Lys Val
                                           300
                      295
Thr Ser Asp Asn Asp
<210> 1938
<211> 246
<212> PRT
<213> Unknown (H38g856 protein)
<220>
<223> Synthetic construct
<221> VARIANT
<222> (1)...(246)
<223> Xaa = Any Amino Acid
<400> 1938
Cys Ile Gln Gln His Xaa Ser Pro Leu Cys Leu Cys Met Phe Ser Phe
                5
                                  10
Tyr Phe Asn Leu Tyr His Phe Phe Pro Lys Xaa Lys Tyr Leu His Ser
                               25
Leu Arg Asp Ala Glu Ile Asn Xaa Leu Val Xaa Ser Lys Val Leu Ile
                           40
Asn Gln Ile Tyr Thr Lys Ala Asn Trp Pro Phe His Gly Leu Xaa His
                       55
                                          60
Tyr Ala Gln Pro Leu His Thr Gln Thr Cys Ile Ser Phe Ser Asn Val
                                       75
                  70
Ile Xaa Cys Ser Thr Xaa Leu Phe Thr Gly His Phe Phe Leu Gly Gly
               85
                    . .
                                  90
Ser Gln Ile Phe Leu Leu Leu Val Met Ala Tyr Gly His Tyr Arg Ala
                              105
Ile Cys Lys Ser Leu Gln Tyr Leu Val Val Met Lys Gln Trp Leu Cys
      115
                          120
                                              125
Val Val Leu Leu Val Val Ser Trp Ala Gly Gly Phe Leu His Ile Val
                       135
                                           140
Ile Gln Leu Gly Leu Ile Tyr Gly Leu Pro Ser Tyr Asp Pro Asn Val
                  150
                                       155
Ile Gly His Phe Ile Cys Asp Met Asp Pro Leu Met Lys Leu Val Cys
                                   170
Asp Tyr Thr Leu Asn Arg Phe Ala Tyr Phe Ala Gly His Asp Xaa Ile
                               185
                                                   190
Leu Gly Phe Met Tyr Phe Thr Tyr Ala Gln Thr Gly Leu Phe Pro Phe
                           200
Gly Asp Ser Thr Ser Leu Phe Phe Cys His Phe Phe Pro Arg Gly Leu
                       215
                                           220
Gly Ser Ile Asn Leu Ala Ile His Ser Tyr Tyr Pro Cys Gly Ile Ser
225
                   230
                                       235
```

```
Arg Asp Thr Glu Pro Thr
<210> 1939
<211> 262
<212> PRT
<213> Unknown (H38g857 protein)
<223> Synthetic construct
<221> VARIANT
<222> (1)...(262)
<223> Xaa = Any Amino Acid
<400> 1939
Leu Ile Val Val Thr Val Thr Val Ser Glu Thr Leu Gly Ser Pro Met
                                  10
1 5
Tyr Phe Phe Leu Ala Gly Leu Ser Phe Ile Asp Ile Ile Tyr Ser Ser
                               25
                                                  30
Ser Ile Ser His Arg Leu Ile Ser Asp Leu Phe Phe Gly Asn Asn Ser
                          40
Ile Ser Phe Pro Ser Cys Leu Ala Gln Leu Phe Thr Glu His Leu Phe
                      55
Gly Gly Ser Glu Val Phe Leu Leu Leu Val Met Ala Tyr Asp Leu His
                                      75
Tyr Leu Val Ile Met Arg Gln Trp Val Cys Val Leu Leu Val Ala
               85
                                  90
Ser Trp Val Gly Gly Phe Leu His Ser Val Phe Gln Leu Ser Val Ile
                              105
                                                  110
           100
Tyr Gly Leu Pro Phe Cys Asp Leu Asn Val Ile Asp His Phe Phe Cys
                           120
                                              125
Asp Met His Pro Leu Leu Lys Leu Val Cys Thr Asp Thr His Val Ile
                                          140 .
   130
                      135
Gly Leu Leu Val Val Ala Asn Gly Gly Leu Gly Cys Thr Ile Val Phe
                                      155
                  150
Leu Leu Leu Ile Ser Tyr Gly Val Ile Leu His Ser Leu Lys Asn
                                  170
                                           175
              165
Leu Ser Gln Lys Gly Arg Xaa Lys Ala Leu Ser Thr Cys Ser Ser His
                                                  190
                              185
          180
Ile Thr Val Val Val Phe Phe Val Pro Cys Ile Phe Met Tyr Ala
       195
                           200
                                              205
Arg Pro Ala Arg Thr Phe Pro Ile Asp Lys Ser Val Ser Val Phe Tyr
                                          220
                       215
Thr Val Ile Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn
                                     235
                 230
Ser Glu Met Thr Ser Ala Met Lys Lys Leu Trp Arg Arg Asp Phe Ile
                                  250
               245
Ser Ser Ser Thr Xaa Val
           260
<210> 1940
<211> 309
<212> PRT
<213> Unknown (H38g858 protein)
<220>
<223> Synthetic construct
<221> VARIANT
<222> (1)...(309)
```

<223> Xaa = Any Amino Acid

```
<400> 1940
Met Arg Gln Asn Asn Asn Ile Thr Glu Phe Val Leu Leu Gly Phe Ser
Gln Asp Leu Asp Val Gln Lys Ala Leu Phe Val Ile Phe Leu Leu Thr
                                25
Tyr Leu Val Thr Val Val Gly Asn Leu Leu Ile Val Val Thr Ile Ile
Ala Ser Pro Ser Leu Gly Ser Ser Met Tyr Phe Phe Leu Ala Cys Leu
Ser Phe Ile Asp Ala Ala Tyr Ser Thr Thr Ile Ser Pro Lys Leu Ile
                                        75
                    70
Val Asp Leu Leu Cys Asp Lys Lys Thr Ile Ser Phe Pro Ala Cys Met
                                    90
                85
Gly Gln Leu Phe Ile Asp His Leu Asp Gly Gly Ala Glu Val Val Leu
                                105
Leu Val Val Lys Ala Cys Asp His His Val Asp Ile Trp Lys Pro Leu
                            120
Arg Tyr Leu Thr Ile Met Asn Arg Gln Gly Xaa Met Arg Leu Leu Val
                        135
    130
Ala Val Val Thr Gly Gly Val Leu His Ser Leu Ser His Ile Val Ser
                                        155
                    150
Val Val Tyr Ser Leu Ala Tyr Cys Gly Pro Asn Val Ile Asp Tyr Phe
                                    170
                                                        175
                165
Val Cys Asp Met Tyr Pro Leu Leu Glu Leu Val Cys Thr Asp Thr Tyr
                                                    190
                                185
Phe Ile Gly Leu Thr Val Phe Val Asn Gly Gly Thr Ile Cys Ile Val
                            200
                                                205
Val Phe Thr Leu Leu Leu Ile Ser Tyr Gly Val Ile Leu Asn Ser Leu
                        215
                                            220
Lys Thr Tyr Ser Gln Glu Gly Arg His Lys Val Leu Phe Thr Cys Ser
                    230
                                        235
Ser His Ile Ile Val Phe Ala Leu Phe Phe Val Pro Cys Ile Phe Met
                245
                                    250
Tyr Val Arg Pro Val Ser Asn Tyr Pro Phe Asp Lys Phe Leu Thr Val
                               265
Phe Tyr Thr Val Ile Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu
                           280
        275
Arg Asn Ser Glu Met Arg Asn Ser Val Glu Thr Leu Leu Cys Lys Lys
                        295
Leu Thr Val Leu Glu
305
<210> 1941
<211> 3.05
<212> PRT
```

<213> Unknown (H38g859 protein)

<220>

<223> Synthetic construct

<400> 1941

 Met Gln Arg
 Ser Asn His Thr Val Thr Glu Phe Ile Leu Leu Gly Phe

 1
 5
 10
 15

 Thr Thr Asp Pro Gly Met Gln Leu Gly Leu Phe Val Val Phe Leu Gly
 20
 25
 30

 Val Tyr Ser Leu Thr Val Val Gly Asn Ser Thr Leu Ile
 45

 Cys Asn Asp Ser His Leu His Thr Pro Met Tyr Phe Val Val Gly Asn

 50
 55
 60

```
Leu Ser Phe Leu Asp Leu Trp Tyr Ser Ser Val Tyr Thr Pro Lys Ile
                                      75
Leu Val Ile Cys Ile Ser Glu Asp Lys Ser Ile Ser Phe Ala Gly Cys
                                  90
Leu Cys Gln Phe Phe Phe Ser Ala Gly Leu Ala Tyr Ser Glu Cys Cys
                              105
                                                  110
           100
Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Ser Lys Pro
                                              125
                          120
Leu Leu Tyr Ala Gln Ala Met Ser Ile Lys Leu Cys Ala Leu Leu Val
                       135
                                          140
Ala Val Ser Tyr Cys Gly Gly Phe Ile Asn Ser Ser Ile Ile Thr Lys
                   150
                                      155
Lys Thr Phe Ser Phe Asn Phe Cys Arg Glu Asn Ile Ile Asp Asp Phe
                                  170
               165
Phe Cys Asp Leu Leu Pro Leu Val Glu Leu Ala Cys Gly Glu Lys Gly
    - 180
                              185
Gly Tyr Lys Ile Met Met Tyr Phe Leu Leu Ala Ser Asn Val Ile Cys
      195
                        200
                                             205
Pro Ala Val Leu Ile Leu Ala Ser Tyr Leu Phe Ile Ile Thr Ser Val
                      215
                                      220
Leu Arg Ile Ser Ser Ser Lys Gly Tyr Leu Lys Ala Phe Ser Thr Cys
                                      235
           230
Ser Ser His Leu Thr Ser Val Thr Leu Tyr Tyr Gly Ser Ile Leu Tyr
               245
                                  250
Ile Tyr Ala Leu Pro Arg Ser Ser Tyr Ser Phe Asp Met Asp Lys Ile
                                                 270
                               265
Val Ser Thr Phe Tyr Thr Val Val Phe Pro Met Leu Asn Leu Met Ile
                                           285
                         280
Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Leu Lys Lys Leu Leu
                       295
Pro
305
<2:10> 1942
<211>.316
<212> PRT
<213> Unknown (H38g860 protein)
<220>
<223> Synthetic construct
<400> 1942
Met Ile Cys Glu Asn His Thr Arg Val Thr Glu Phe Ile Leu Leu Gly
                                  10
              5
Phe Thr Asn Asn Pro Glu Met Gln Val Ser Leu Phe Ile Phe Phe Leu
                              25
        20
Ala Ile Tyr Thr Val Thr Leu Leu Gly Asn Phe Leu Ile Val Thr Val
       35
                          40
                                              45
Thr Ser Val Asp Leu Ala Leu Gln Thr Pro Met Tyr Phe Phe Leu Gln
                                          60
                       55
Asn Leu Ser Leu Leu Glu Val Cys Phe Thr Leu Val Met Val Pro Lys
                                      75
                   70
Met Leu Val Asp Leu Val Ser Pro Arg Lys Ile Ile Ser Phe Val Gly
                                  90
Cys Gly Thr Gln Met Tyr Phe Phe Phe Phe Gly Ser Ser Glu Cys
                              105
Phe Leu Leu Ser Met Met Ala Tyr Asp Arg Phe Val Ala Ile Cys Asn
                          120
                                             125
      115 ·
Pro Leu His Tyr Ser Val Ile Met Asn Arg Ser Leu Cys Leu Trp Met
                      135
                                          140
Ala Ile Gly Ser Trp Met Ser Gly Val Pro Val Ser Met Leu Gln Thr
```

PCT/US00/27582 WO 01/27158

```
150
                                       155
Ala Trp Met Met Ala Leu Pro Phe Cys Gly Pro Asn Ala Val Asp His
                                   170
               165
Phe Phe Cys Asp Gly Pro Pro Val Leu Lys Leu Val Thr Val Asp Thr
                               185
           180
Thr Met Tyr Glu Met Gln Ala Leu Ala Ser Thr Leu Leu Phe Ile Met
                           200
Phe Pro Phe Cys Leu Ile Leu Val Ser Tyr Thr Arg Ile Ile Ile Thr
                                           220
                       215
Ile Leu Arg Met Ser Ser Ala Thr Gly Arg Gln Lys Ala Phe Ser Thr
                   230
                                       235
Cys Ser Ser His Leu Ile Val Val Ser Leu Phe Tyr Gly Thr Ala Ser
               245
                                   250
Leu Thr Tyr Leu Arg Pro Lys Ser Asn Gln Ser Pro Glu Ser Lys Lys
           260
                               265
Leu Val Ser Leu Ser Tyr Thr Val Ile Thr Pro Met Leu Asn Pro Ile
                           280
Ile Tyr Gly Leu Arg Asn Asn Glu Val Lys Gly Ala Val Lys Arg Thr
                      295
Ile Thr Gln Lys Val Leu Gln Lys Leu Asp Val Phe
                   310
<210> 1943
<211> 309
<212> PRT
<213> Unknown (H38g861 protein)
<220>
<223> Synthetic construct
<400> 1943
Met Ala Asn Arg Asn Asn Val Thr Glu Phe Ile Leu Leu Gly Leu Thr
                                    10
Glu Asn Pro Lys Met Gln Lys Ile Ile Phe Val Val Phe Ser Val Ile
          20
                                25
Tyr Ile Asn Ala Met Ile Gly Asn Val Leu Ile Val Val Thr Ile Thr
                           40
Ala Ser Pro Ser Leu Arg Ser Pro Met Tyr Phe Phe Leu Ala Tyr Leu
Ser Phe Ile Asp Ala Cys Tyr Ser Ser Val Asn Thr Pro Lys Leu Ile
                   70
                                       75
Thr Asp Ser Leu Tyr Glu Asn Lys Thr Ile Leu Phe Asn Gly Cys Met
                                   90
               85
Thr Gln Val Phe Gly Glu His Phe Phe Arg Gly Val Glu Val Ile Leu
                               105
           100
Leu Thr Val Met Ala Tyr Asp His Tyr Val Ala Ile Cys Lys Pro Leu
                           120
His Tyr Thr Thr Ile Met Lys Gln His Val Cys Ser Leu Leu Val Gly
                       135
                                            140
Val Ser Trp Val Gly Gly Phe Leu His Ala Thr Ile Gln Ile Leu Phe
                   150
                                       155
Ile Cys Gln Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Phe Met
```

230 235

215

Cys Asp Leu Tyr Thr Leu Ile Asn Leu Ala Cys Thr Asn Thr His Thr

Thr His Ser Leu Glu Ala Arg His Glu Ala Leu Ser Thr Cys Val Ser

185 Leu Gly Leu Phe Ile Ala Ala Asn Ser Gly Phe Ile Cys Leu Leu Asn 200 Cys Leu Leu Leu Val Ser Cys Val Val Ile Leu Tyr Ser Leu Lys

165

180

170

1120

220

```
His Ile Thr Val Val Ile Leu Ser Phe Ile Pro Cys Ile Phe Val Tyr
                  245
                                      250
  Met Arg Pro Pro Ala Thr Leu Pro Ile Asp Lys Ala Val Ala Val Phe
              260
                                  265
  Tyr Thr Met Ile Thr Ser Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg
                              280
                                                  285
  Asn Ala Gln Met Lys Asn Ala Ile Arg Lys Leu Cys Ser Arg Lys Ala
                                              300
 Ile Ser Ser Val Lys
 305
 <210> 1944
 <211> 164
 <212> PRT
 <213> Unknown (H38g862 protein)
 <220>
 <223> Synthetic construct
 <221> VARIANT
 <222> (1)...(164)
 <223> Xaa = Any Amino Acid
 <400> 1944
 Trp Lys Asn His Phe Thr Ser Val Asn Cys Gly Phe Ala Ile Cys Arg
                                     10
 Ala Glu Cys Xaa Pro Xaa Pro Lys Ile Leu Ser Ile Ile Gly Leu Lys
             20
                                 25
 Xaa Asn Ile Asn Glu Thr Leu Xaa Met Leu Asn Tyr Asn Thr Asn His
 Met Val Ser Val Asp Val Leu Ile Val Pro Asn Ser Leu Ile Thr Leu
                         55
 Ser Tyr Phe Phe Ile Val Ala Ala Ile Leu His Ile Arg Ser Ala Glu
                     70
                                         75
 Gly Arg His Lys Ala Phe Pro Thr Cys Ser Phe His Leu Val Val Ile
                 85
                                     90
Leu Leu Gln His Asn Ala Thr Ser Leu Thr Tyr Leu Cys Pro Ser Ser
                                 105
 Ile Phe Ser Tyr Glu Arg Gly Lys Val Val Ser Thr Val Tyr Thr Cys
                            120
Ile Thr Pro Val Pro Asn Pro Leu Ile Cys Ser Met Arg Lys Lys Glu
                         135
                                             140
Leu Lys His Ala Leu Lys Lys Lys Glu Glu Ile Ala Arg Phe Leu Leu
                    150
Leu Arg Thr His
<210> 1945
<211> 318
<212> PRT
<213> Unknown (H38g863 protein)
<220>
<223> Synthetic construct
<400> 1945
Met Phe Ser Ser Glu Pro Thr Ile Asp Gly Asn Gln Ser Leu Cys Ala
                                    10
Lys Phe Thr Phe Val Ala Phe Ser Ser Ile Glu Glu Leu Gln Leu Val
            20
                                25
Leu Phe Ile Val Phe Leu Ile Ile Tyr Leu Cys Thr Ile Gly Gly Asn
```

```
35
                              40
 Ile Ile Ile Ser Leu Ile Trp Ile Thr Pro Ala Leu His Thr Pro
                         55
 Met Tyr Phe Phe Leu Val Asn Leu Ser Phe Leu Glu Met Cys Tyr Thr
                     70
 Thr Ser Val Val Pro Leu Leu Val His Leu Leu Val Glu Thr Lys Thr
                                     90
 Ile Ser Val Gly Gly Cys Ala Thr Gln Met Tyr Ile Phe Ala Ile Leu
                                 105
 Gly Leu Thr Glu Cys Cys Leu Leu Ala Ala Met Ala Tyr Asp Arg Phe
                             120
                                                 125
 Val Ala Ile Cys Tyr Pro Leu His Tyr Thr Leu Phe Met Gly Pro Arg
                         135
 Val Cys Leu Lys Leu Ala Ala Ser Trp Phe Thr Gly Val Val Val
                     150
                                         155
 Glu Ser Ala Gln Ile Thr Leu Ile Phe Thr Leu Pro Phe Cys Gly Thr
                 165
                                     170
 Gly Lys Ile Pro Thr Leu Phe Cys Asp Ile Met Pro Val Leu Lys Leu
             180
                                 185
 Ala Cys Ile Asp Thr Ser Gln Ile Glu Ile Val Met Phe Ser Leu Ser
         195
                             200
 Val Leu Phe Ile Val Ser Pro Cys Phe Leu Ile Leu Cys Ser His Met
                         215
                                             220
 His Ile Pro Val Thr Ile Leu Arg Ile Pro Ser Ala Ala Gly Arg His
                     230
                                         235
 Lys Ala Phe Ser Thr Cys Ser Ser His Ile Leu Val Val Ser Leu Phe
                245
                                     250
 Tyr Gly Thr Ala Leu Phe Thr Tyr Leu Gln Pro Lys Thr Ala His Thr
                                 265
 Pro Glu Thr Asp Lys Ala Thr Ala Leu Met Tyr Thr Met Val Thr Pro
        275
                             280
Ala Leu Asn Pro Val Ile Tyr Thr Leu Arg Asn Lys Glu Val Lys Glu
                        295
Ala Phe Gln Arg Ile Thr Gln Arg Asn Ser Leu Arg Gln Thr
                    310
                                         315
<210> 1946
<211> 291
<212> PRT
<213> Unknown (H38g864 protein)
<223> Synthetic construct
<221> VARIANT
<222> (1)...(291)
<223> Xaa = Any Amino Acid
<400> 1946
Ser Met Tyr Leu Val Thr Met Leu Arg Asn Leu Phe Ile Ile Leu Ala
                                    10
Gly Ser Ser Asp Pro His Phe His Thr Pro Met Tyr Phe Phe Leu Ser
Asn Leu Ser Trp Ala Asp Ile Gly Phe Thr Ser Ala Thr Val Pro Lys
                            40
Met Ile Val Asp Met Gln Ser His Ser Arg Val Ile Ser Tyr Ala Gly
                        55
Cys Leu Thr Gln Met Ser Phe Phe Val Leu Phe Ala Cys Ile Glu Asp
                    70
Met Leu Leu Thr Leu Met Ala Tyr Asp Arg Phe Val Ala Ile Cys His
```

90

```
Ile Cys His Pro Leu His Tyr Arg Val Ile Met Asn Pro His Leu Cys
                               105
            100
Val Phe Leu Val Leu Val Ser Phe Phe Leu Ser Leu Leu Asp Ser Gln
                            120
                                                125
Leu His Ser Trp Ile Val Leu His Asn Ser Pro Phe Gln Glu Cys Gly
                        135
                                            140
Asn Leu Xaa Phe Phe Phe Cys Asp Pro Ser Gln Leu Leu Asn Leu Ala
                    150
                                        155
Cys Ser Asp Ser Ile Ile Asn Asn Ile Leu Cys Ile Leu Asp Ile Pro
                                   170
               165
Ile Phe Gly Phe Leu Pro Ile Ser Gly Ile Leu Leu Ser Tyr Tyr Lys
                                185
Ile Val Ser Ser Ile Pro Arg Ile Pro Ser Ser Asp Gly Lys Tyr Lys
                           200
                                                205
Ala Phe Ser Thr Cys Gly Ser His Leu Ala Val Val Cys Leu Phe Tyr
                        215
                                           220
Glu Thr Gly Ile Gly Val Tyr Leu Thr Ser Ala Val Ser Ser Pro
                    230
                                        235
Arg Asn Gly Val Val Ala Ser Val Met Tyr Ala Val Val Ile Pro Met
                245
                                    250
Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn Arg Asp Ile His Ser Ala
            260
                                265
Leu Trp Arg Leu Arg Ser Arg Thr Val Lys Ser His Asp Leu Phe His
        275
                            280
                                                285
Pro Phe Ser
    290
<210> 1947
<211> 327
<212> PRT
<213> Unknown (H38g865 protein)
<220>
<223> Synthetic construct
<221> VARIANT
<222> (1)...(327)
<223> Xaa = Any Amino Acid
<400> 1947
Met Asp Val Ser Ile Phe Leu Leu Gly Thr Thr Glu Asp Pro Glu
                5
                                    10
Arg Gln Pro Val Leu Thr Gly Leu Phe Leu Ser Met Cys Leu Val Thr
                                25
Val Leu Gly Lys Leu Leu Ile Met Leu Ala Phe Ser Pro Asp Ser His
                            40
Leu His Thr His Met Tyr Phe Phe Leu Ser Asn Leu Ser Leu Pro Asp
                       55
Ile Gly Phe Thr Ser Thr Ile Val Pro Lys Met Ile Ala Asp Ile Gln
                    70
Ser His Ser Arg Val Ile Ser Tyr Ala Gly Arg Leu Thr Gln Met Ser
               85
                                   90
Leu Phe Ala Ile Phe Gly Gly Met Glu Glu Asp Met Leu Leu Ser Val
           100
                               105
Met Ala Tyr Asp Arg Phe Val Ala Ile Cys His Pro Leu Tyr His Ser
       115
                           120
                                               125
Ala Ile Met Asn Pro Cys Phe Cys Gly Phe Leu Leu Leu Phe Phe
                       135
                                           140
Phe Phe Leu Ser Leu Leu Asp Thr Gln Leu His Asn Leu Ile Ala Leu
                   150
                                       155
Gln Met Thr Cys Phe Lys Asp Val Glu Ile Pro Asn Phe Phe Trp Asp
```

```
170
               165
Pro Ser Gln Leu Pro His Leu Ala Cys Cys Asp Thr Phe Thr Asn Asn
                               185
           180
Ile Ile Val Tyr Phe Pro Ala Val Ile Phe Val Phe Leu Pro Ile Ser
                           200
Gly Thr Leu Phe Ser Tyr Lys Thr Val Ser Ser Ile Leu Arg Val Ser
                                           220
                       215
Ser Ser Gly Gly Lys Tyr Lys Thr Phe Ser Thr Cys Gly Ser His Leu
                                       235
                   230
Ser Val Ile Cys Xaa Phe Tyr Gly Thr Gly Val Gly Gly Tyr Leu Ser
                                   250
               245
Ser Asp Val Ser Ser Ser Leu Arg Lys Ala Ala Val Ala Ser Val Met
                               265
           260
Tyr Lys Met Val Thr Pro Met Leu Asn Pro Phe Ile Tyr Ser Leu Arg
                                               285
                           280
Asn Arg Asp Met Lys Ser Val Leu Arg Arg Pro His Gly Ser Thr Val
                       295
                                           300
Xaa Ser Gln Tyr Leu Leu Ile Cys Ser Ile Pro Phe Val Gly Trp Val
                                       315
                   310
Lys Lys Gly Ser Lys Val Lys
<210> 1948
<211> 254
<212> PRT
<213> Unknown (H38g866 protein)
<220>
<223> Synthetic construct
<400> 1948
Met Gly Asp Lys Gly Thr Gly Asn His Ser Asp Val Thr Asp Phe Ile
Leu Glu Gly Phe Arg Val Arg Pro Glu Phe Tyr Ile Leu Leu Phe Phe
                                25
Leu Phe Leu Leu Ile Tyr Ser Met Val Leu Leu Gly Asn Ile Ser Val
                            40
Met Thr Ile Ile Val Thr Asp Ser Gln Leu Asn Thr Pro Met Tyr Phe
                                            60
                        55
Phe Leu Gly Asn Leu Ser Phe Ile Asp Val Ser Tyr Ser Thr Val Ile
                   70
                                        75
Ala Pro Lys Ala Met Ala His Phe Leu Ser Glu Lys Lys Thr Val Ser
                                   90
Phe Ala Gly Cys Val Ala Gln Leu Phe Leu Phe Ala Leu Phe Ile Val
                               105
Thr Glu Gly Phe Val Leu Ala Ala Met Ala Tyr Asp Arg Phe Ser Ala
                            120
Ile Cys Asn Pro Leu Leu His Ser Val His Met Ser Arg Arg Leu Cys
                       135
Thr Gln Leu Val Ala Gly Ser Tyr Phe Cys Gly Trp Ala Ser Ser Ile
                                        155
                    150
Leu Gln Val Ser Val Thr Phe Ser Val Ser Phe Cys Ala Ser Arg Val
                                    170
               165
Ile Ala His Phe Tyr Cys Asp Ser Tyr Gln Ile Glu Lys Ile Ser Cys
                                                    190
                                185
Ser Asn Leu Phe Val Asn Lys Met Val Ser Leu Ser Leu Ser Val Ile
                            200
Ile Ile Leu Pro Thr Ile Val Val Ile Ile Val Ser Tyr Leu Tyr Ile
                       215
                                            220
Val Ser Ser Val Leu Lys Ile Pro Ser Ser Glu Gly Arg Lys Lys Asp
                                        235
                    230
```

Phe Ser Thr Cys Ser Ser His Arg Gly Val Val Ser Leu Leu <210> 1949 <211> 335 <212> PRT <213> Unknown (H38g867 protein) <223> Synthetic construct <221> VARIANT <222> (1)...(335) <223> Xaa = Any Amino Acid <400> 1949 Tyr Thr Asp Pro Gln Asn Leu Thr Asp Ala Ser Lys Tyr Leu Leu Leu 10 5 1 Glu Leu Ser Glu Asp Pro Lys Leu Gln Leu Ala Leu Ser Gly Arg Glu 30 20 25 Pro Cys Thr Cys Thr Xaa Ser Leu Val Leu Glu Asn Leu Leu Ile Ile 40 Leu Ala Val Ser Ser Asp Phe His Leu His Thr Pro Met Tyr Phe Phe 55 Leu Ser Asn Leu Ser Leu Ala Asp Ile Gly Phe Thr Ser Asn Thr Val Pro Lys Met Ile Val Asp Ile Gln Ser His Ser Arg Val Ile Ser Tyr 85 90 Ala Gly Cys Leu Thr Gln Met Ser Leu Phe Ala Val Phe Gly Gly Met 105 110 100 Glu Glu Asn Met Leu Leu Ser Val Arg Ala Tyr Asp Arg Phe Val Ala 120 125 115 Ile Cys His Pro Leu Tyr Tyr Ser Ala Ile Met Asn Pro Cys Phe Cys 140 130 135 Gly Phe Leu Val Leu Phe Phe Phe Phe Leu Ser Leu Leu Asp Ser Gln 150 155 Leu His Asn Leu Ile Ala Leu Gln Met Thr Cys Ile Lys Asp Val Glu 175 165 170 Ile Pro Asn Phe Phe Trp Asp Pro Ser Gln Leu Pro His Leu Ala Cys 180 190 185 Cys Asp Thr Phe Thr Asn Asn Ile Val Met Tyr Phe Leu Ala Ala Ile 195 200 205 Phe Gly Phe Leu Pro Ile Ser Arg Ile Ile Phe Ser Tyr Tyr Lys Ile 220 210 215 Val Ser Ser Met Leu Ser Val Ser Ser Ser Gly Gly Lys Tyr Lys Ala 230 235 Phe Ser Thr Cys Gly Ser Pro Leu Ser Val Val Cys Leu Phe Tyr Gly 245 250 255 Lys Val Val Gly Gly Tyr Leu Ser Ser Asp Val Ser Ser Ser Pro Arg 270 265 260 Lys Gly Ala Val Ala Ser Met Met Tyr Thr Val Ile Thr Pro Met Leu 275 280 285 Asn Pro Phe Ile Tyr Arg Leu Arg Asn Arg Asp Ile Lys Arg Val Leu 295 300 Trp Trp Leu His Gly Arg Thr Val Xaa Ser His Tyr Phe Ile Ile Cys 315 305 310 Ser Ile Pro Phe Val Val Trp Val Lys Lys Gly Ser Lys Val Lys 330 325 <210> 1950 <211> 317

```
<212> PRT
<213> Unknown (H38g868 protein)
<220>
<223> Synthetic construct
<221> VARIANT
<222> (1)...(317)
<223> Xaa = Any Amino Acid
<400> 1950
Thr Gly Val Xaa Glu Phe Leu Leu Leu Gly Leu Ser Glu Asp Pro Glu
                                 10
Leu Gln Pro Ala Leu Ala Leu Leu Ser Leu Ser Leu Ser Met Tyr Leu
                              25
           20
Val Thr Val Leu Arg Asn Leu Phe Ser Ile Leu Ala Val Ser Ser Asp
                          40
Cys Pro Leu His Thr Pro Met Tyr Phe Phe Leu Ser Asn Leu Cys Trp
                                       60
                      55
Pro Asp Ile Gly Phe Thr Ser Ala Met Val Pro Lys Met Ile Val Asp
                                     75 ·
                70
Thr Gln Ser His Ser Arg Val Ile Ser His Ala Gly Cys Leu Thr Gln
                                  90
              85
Met Ser Phe Leu Leu Val Ala Cys Ile Glu Gly Met Leu Leu Thr
          100
                               105
Val Met Ala Tyr Asp Cys Phe Val Ala Ile Cys Arg Pro Leu His Tyr
                                              125
                           120
Pro Val Ile Val Asn Pro His Leu Cys Val Phe Phe Val Leu Val Ser
                                          140
                       135
Phe Phe Leu Ser Leu Leu Asp Ser Gln Leu His Ser Trp Ile Val Leu
                                      155
                   150
Gln Leu Thr Ile Ile Lys Asn Val Glu Ile Ser Asn Leu Val Cys Asp
                                  170
               165
Pro Ser Gln Leu Leu Lys Leu Ala Cys Ser Asp Ser Val Ile Asn Asn
                               185
           180
Ile Phe Ile Tyr Phe Asp Ser Thr Met Phe Gly Phe Leu Pro Ile Ser
                           200
                                              205
Gly Ile Phe Leu Ser Tyr Tyr Lys Ile Val Pro Ser Ile Leu Arg Ile
                                          220
                       215
Ser Ser Ser Asp Gly Lys Tyr Lys Ala Phe Ser Thr Cys Gly Cys His
                                      235
                  230
Leu Ala Val Val Cys Trp Phe Tyr Gly Thr Gly Ile Gly Met Tyr Leu
                                  250
               245
Thr Ser Ala Val Ser Pro Pro Pro Arg Asn Gly Val Val Ala Ser Val
                                                  270
                              265
          260
Met Tyr Ala Val Val Thr Pro Met Leu Asn Leu Phe Ile Cys Ser Leu
                                              285
                           280
      275
Arg Asn Arg Asp Ile Gln Ser Ala Leu Arg Arg Leu Gly Ser Arg Ala
                      295
                                          300
Phe Glu Ser Pro Xaa Ser Val Pro Ser Phe Phe Leu Cys
                   310
                                     315
<210> 1951
<211> 313
<212> PRT
<213> Unknown (H38g869 protein)
<223> Synthetic construct
<400> 1951
```

Met Gly Asp Arg Gly Thr Ser Asn His Ser Glu Met Thr Asp Phe Ile

```
10
Leu Ala Gly Phe Arg Val Arg Pro Glu Leu His Ile Leu Leu Phe Leu
                                25
Leu Phe Leu Phe Val Tyr Ala Met Ile Leu Leu Gly Asn Val Gly Met
                            40
Met Thr Ile Ile Met Thr Asp Pro Arg Leu Asn Thr Pro Met Tyr Phe
                        55
Phe Leu Gly Asn Leu Ser Phe Ile Asp Leu Phe Tyr Ser Ser Val Ile
                    70
                                        75
Glu Pro Lys Ala Met Ile Asn Phe Trp Ser Glu Asn Lys Ser Ile Ser
                                   90
               85
Phe Ala Gly Cys Val Ala Gln Leu Phe Leu Phe Ala Leu Leu Ile Val
                               105
            100
Thr Glu Gly Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Phe Ile Ala
                           120
                                               125
Ile Cys Asn Pro Leu Leu Tyr Ser Val Gln Met Ser Thr Arg Leu Cys
                                           140
                       135
Thr Gln Leu Val Ala Gly Ser Tyr Phe Cys Gly Cys Ile Ser Ser Val
                                        155
                   150
Ile Gln Thr Ser Met Thr Phe Thr Leu Ser Phe Cys Ala Ser Arg Ala
                165
                                    170
Val Asp His Phe Tyr Cys Asp Ser Arg Pro Leu Gln Arg Leu Ser Cys
                                185
Ser Asp Leu Phe Ile His Arg Met Ile Ser Phe Ser Leu Ser Cys Ile
                            200
        195
Ile Ile Leu Pro Thr Ile Ile Val Ile Ile Val Ser Tyr Met Tyr Ile
                        215
                                            220
Val Ser Thr Val Leu Lys Ile His Ser Thr Glu Gly His Lys Lys Ala
                                        235
                   230
Phe Ser Thr Cys Ser Ser His Leu Gly Val Val Ser Val Leu Tyr Gly
                                    250
                245
Ala Val Phe Phe Met Tyr Leu Thr Pro Asp Arg Phe Pro Glu Leu Ser
                                                   270
                                265
            260
Lys Val Ala Ser Leu Cys Tyr Ser Leu Val Thr Pro Met Leu Asn Pro
                          280
       275
Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Gln Glu Ala Leu Lys Lys
                       295
Phe Leu Glu Lys Lys Asn Ile Ile Leu
                   310
<210> 1952
<211> 277
<212> PRT
<213> Unknown (H38g870 protein)
<220>
<223> Synthetic construct
<221> VARIANT
<222> (1)...(277)
<223> Xaa = Any Amino Acid
<400> 1952
His Ser Phe Leu Arg Tyr Ile Phe Ala Lys Leu Thr Gly Glu Pro Glu
                                    10
Leu Gln Pro Ser Leu Tyr Ser Val Phe Trp Ser Pro Xaa Leu Gly Xaa
                                25
            20
Pro His His Thr Ser Met Tyr Pro Leu His Thr Ser Met Tyr Leu Tyr
                            40
Ile Phe Ser Phe Ser Phe Ile Gly Phe Phe Tyr Ser Ser Val Ile Ser
```

```
55
                                           60
Pro Gln Met Thr Ile Ser Phe Val Thr Glu Lys Asn Ile Ile Thr Tyr
                  70
                                       75
Val Thr Ser Asn Thr Gln Pro Phe Pro Leu Cys Phe Phe Val Ile Ser
                                   90
               85
Asp Tyr Ser Ile Phe Ile Pro Leu Ala Leu Asp His Tyr Glu Ala Met
                              105
           100
Thr Leu Pro Val Ser Phe Ile Ser Phe Ile Ser Val Asp Gly Ser Xaa
                           120
                                              125
Val Ile Glu Phe Ala Asp Ala Val Val His Gln Gly Ser Met Asp Gln
                       135
                                          140
Phe Leu Phe Cys Asp His Ser Cys Met Ser Leu Asn Leu Cys Asn Ile
                                       155
                  150
Gly Pro Leu Gln Ala Ala Xaa Ile Ser Thr Tyr Val Ser Lys Gln Val
                                   170
Asp Leu Tyr Ser Xaa Glu Pro Ala Val Tyr His Ala Val Leu Ser Phe
                                                   190
                               185
Ser Tyr Phe Val Phe Ile Leu Phe Asn Ile Phe His Xaa Pro Ser Gly
                           200
Pro Asn Leu Gln Pro Asp Ser Ile Asn Leu Phe Ile Ser Phe Phe Gly
                       215
                                           220
Leu Gly Thr Phe Met Tyr Leu Arg Ser Pro Glu Ala Met Gly Xaa Cys
                  230
                                       235
Lys Phe Thr Val Ser Phe Thr Lys Met Gly Pro Val Met Asn Gly Leu
                                   250
Phe Asn Thr Leu Arg Asn Lys Thr Ile Xaa Leu Ala Ala Met Lys Pro
                               265
Leu Ser Phe Ser Ser
        275
<210> 1953
<211> 335
<212> PRT
<213> Unknown (H38g871 protein)
<220>
<223> Synthetic construct
<221> VARIANT
<222> (1)...(335)
<223> Xaa = Any Amino Acid
<400> 1953
Asp Thr Asp Pro Gln Ser Leu Thr Asp Val Ser Ile Phe Leu Leu
                                    10
Glu Leu Ser Glu Asp Pro Glu Leu Gln Pro Val Val Ala Gly Leu Phe
Leu Ser Met Cys Leu Val Thr Val Leu Glu Asn Leu Leu Ile Ile Leu
                            40
Ala Val Ser Pro Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu
                                           60
                        55
Ser Asn Leu Ser Leu Pro Asp Ile Gly Phe Thr Ser Thr Thr Val Pro
                                        75
                    70
Lys Met Ile Val Asp Ile Gln Ser His Ser Arg Val Ile Ser Tyr Ala
                                   90
                85
Gly Cys Leu Thr Gln Met Ser Leu Phe Ala Ile Phe Gly Gly Arg Glu
                               105
            100
Glu Asn Met Leu Leu Ser Val Met Ala Tyr Asp Gln Phe Val Ala Ile
                                               125
                           120
Cys His Pro Pro Tyr Arg Ser Ala Ile Leu Asn Pro Cys Phe Cys Gly
```

PCT/US00/27582 WO 01/27158

```
Phe Leu Asp Leu Leu Ser Leu Phe Phe Phe Phe Phe Phe Phe Phe Ser
                                       155
                   150
Leu Ser Leu Leu Asp Ser Gln Leu His Asn Leu Ile Ala Leu Gln Met
               165
                                   170
Thr Cys Phe Lys Asp Val Glu Ile Pro Asn Phe Phe Trp Glu Pro Cys
                               185
Cys Asp Thr Phe Thr Arg Asn Ile Asn Met Tyr Phe Pro Ala Ala Val
                          200
                                               205
Phe Gly Phe Leu Pro Ile Ser Gly Thr Leu Phe Ser Tyr Cys Lys Ile
                                           220
                      215
Val Ser Ser Ile Leu Arg Val Ser Ser Ser Gly Gly Lys Tyr Lys Ala
                   230
                                       235
Phe Thr Thr Cys Gly Ser His Leu Ser Val Val Cys Xaa Phe Tyr Gly
                                   250
               245
Thr Gly Val Gly Gly Tyr Leu Gly Ser Asp Val Ser Ser Ser Pro Arg
                                                   270
                               265
            260
Lys Arg Ala Val Ala Ser Val Met Tyr Thr Val Val Thr Pro Met Leu
                          280
                                               285
       275
Asn Pro Phe Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Ser Val Leu
                                           300
                      295
Arg Arg Pro His Ser Ser Ala Val Xaa Ser Gln Tyr Leu Leu Ile Cys
                  310
                                       315
Ser Ile Pro Phe Val Gly Trp Val Lys Lys Gly Ser Lys Val Lys
                                   330
<210> 1954
<211> 342
<212> PRT
```

- <213> Unknown (H38g872 protein)
- <220>
- <223> Synthetic construct
- <221> VARIANT
- <222> (1)...(342)
- <223> Xaa = Any Amino Acid
- <400> 1954
- Asp Thr Asp Pro Gln Ser Leu Thr Asp Val Ser Ile Phe Leu Leu 10 Glu Leu Ser Glu Asp Pro Glu Leu Gln Pro Val Val Ala Gly Leu Phe 25 20 Leu Ser Met Cys Leu Val Thr Val Leu Gly Asn Leu Leu Ile Ile Leu 40 Ala Val Ser Pro Asp Ser His Leu Pro Thr Pro Met Tyr Phe Phe Leu 55 60 Ser Asn Leu Ser Leu Pro Asp Ile Gly Phe Thr Ser Thr Thr Val Pro 70 75 Lys Met Ser Val Asp Ile Gln Ser His Ser Arg Val Ile Ser Tyr Ala 90 85 Gly Cys Leu Thr Gln Met Ser Leu Phe Ala Ile Phe Gly Gly Met Glu 105 110 Lys Arg His Ala Pro Glu Val Met Ala Tyr Asp Leu Phe Val Pro Ile 125 120 Cys His Leu Leu Tyr Arg Ser Thr Ile Leu Asn Pro Phe Val Arg Gly 135 140 Phe Leu Asn Leu Leu Ser Leu Phe Val Gly Phe Phe Phe Ser Leu 155 150 Ser Leu Leu Asp Ser Gln Leu His Asn Leu Ile Ala Leu Gln Met Thr 165 170 Tyr Phe Lys Asp Val Glu Ile Pro Asn Phe Phe Trp Glu Pro Ser Gln

```
180
                               185
Leu Pro His Leu Ala Cys Cys Asp Thr Phe Thr Arg Asn Asn Met
                           200
Tyr Phe Pro Ala Ala Val Phe Gly Phe Leu Pro Ile Ser Gly Thr Leu
                       215
                                           220
Phe Ser Tyr Cys Lys Ile Val Ser Ser Ile Leu Arg Val Ser Ser Ser
                                       235
                   230
Gly Gly Lys Tyr Lys Ala Phe Ser Thr Cys Gly Ser His Leu Ser Val
               245
                                   250
Val Cys Xaa Phe Tyr Gly Ala Gly Val Gly Gly Tyr Leu Gly Ser Asp
           260
                               265
                                                   270
Val Ser Ser Ser Pro Arg Lys Gly Ala Val Ala Ser Val Thr Tyr Tyr
                           280
                                               285
Thr Val Val Thr Pro Met Leu Asn Ser Phe Ile Tyr Ser Leu Arg Asn
                       295
                                           300
Gly Asp Ile Lys Ser Val Leu Arg Arg Pro His Gly Ser Thr Val Xaa
                                       315
                   310
Ser Gln Tyr Val Leu Ile Cys Ser Ile Pro Phe Val Gly Trp Val Asn
               325
                                   330
Lys Asp Ser Lys Val Lys
           340
<210> 1955
```

<211> 348

<212> PRT

<213> Unknown (H38g873 protein)

<220>

<223> Synthetic construct

<400> 1955 Met Asp Leu Gly Asn Ser Gly Asn Asp Ser Val Val Thr Lys Phe Val Leu Leu Gly Leu Thr Glu Thr Ala Ala Leu Gln Pro Ile Leu Phe Val Ile Phe Leu Leu Ala Tyr Val Thr Thr Ile Gly Gly Thr Leu Ser Ile 40 Leu Ala Ala Ile Leu Met Glu Thr Lys Leu His Ser Pro Met Tyr Phe 55 Phe Leu Gly Asn Leu Ser Leu Pro Asp Val Gly Cys Val Ser Val Thr 70 75 Val Pro Ala Met Leu Ser His Phe Ile Ser Asn Asp Arg Ser Ile Pro 85 90 Tyr Lys Ala Cys Leu Ser Glu Leu Phe Phe Phe His Leu Leu Ala Gly 100 105 Ala Asp Cys Phe Leu Leu Thr Ile Met Ala Tyr Asp Arg Tyr Leu Ala 120 125 Ile Cys Gln Ser Leu Thr Tyr Ser Ser Arg Met Ser Trp Gly Ile Gln 135 140 Gln Ala Leu Val Gly Met Ser Trp Val Phe Ser Phe Thr Asn Ala Leu 155 150 Thr Gln Thr Val Ala Leu Ser Pro Leu Asn Phe Cys Gly Pro Asn Val 165 170 Ile Asn His Phe Tyr Cys Asp Leu Pro Gln Pro Phe Gln Leu Ser Cys 185 180 Ala Ser Val His Leu Asn Gly Gln Leu Leu Phe Val Ala Ala Ala Phe 200 205 Met Gly Val Ala Pro Leu Val Leu Ile Thr Val Ser Tyr Ala His Val 220 215 Ala Ala Ala Val Leu Arg Ile Arg Ser Ala Glu Gly Lys Lys Ala 235

```
Phe Ser Thr Cys Ser Ser His Leu Thr Val Val Gly Ile Phe Tyr Gly
                                   250
               245
Thr Gly Val Phe Ser Tyr Thr Arg Leu Gly Ser Val Glu Ser Ser Asp
                                                  270
                              265
Lys Asp Lys Gly Ile Gly Ile Leu Asn Thr Val Ile Ser Pro Met Leu
                                               285
                       280
Asn Pro Leu Ile Tyr Trp Thr Ser Leu Leu Asp Val Gly Cys Ile Ser
                       295
                                           300
His Cys Ser Ser Asp Ala Gly Val Ser Pro Gly Pro Pro Val Gln Ser
                   310
                                       315
Ser Leu Cys Cys Leu Gln Phe Thr Ala Leu Leu Ser Pro Pro Pro Gly
                           330
               325
Trp Gly Gly Leu Ser Pro Leu Asn Ser His Gly Leu
           340
<210> 1956
<211> 230
<212> PRT
<213> Unknown (H38g874 protein)
<223> Synthetic construct
<221> VARIANT
<222> (1) ... (230)
<223> Xaa = Any Amino Acid
<400> 1956
Met Leu Ile Pro Ser Ser Thr Arg Lys Met Ala Ala Glu Ser His Ser
                5
                                   10
Thr Val Thr Glu Phe Ile Leu Arg Lys Lys Pro Ala Arg Ala Pro Ala
                               25
          20
Pro Pro Leu Leu Gly Ile Cys Leu Lys Thr Val Val Gly Ala Leu Ile
Leu Ile Thr Leu Val Phe Leu Asn Ser Gln Leu His Pro Pro Met Tyr
                                          60
                       55
Tyr Val Ile Arg Asn Leu Ser Phe Met Asp His Cys Asn Cys Ser Ile
                  70
                                       75
Ser Thr Pro Lys Ile Leu Val Lys Phe Val Leu Glu Lys Thr Ile Ile
               85
                                   90
Ser Tyr Glu Asp Gly Met Ser Gln Leu Cys Ser Ala Ser Cys Tyr Ile
                              105
                                                   110
          100
Leu Ser Trp Pro Ser Val Thr Cys Gly Pro Ala Thr Ala Val Ile Thr
                                               125
      115
                           120
Phe His Gln Val Ser Ser Leu Leu Val Val Val Tyr Tyr Met Glu
                       135
                                           140
Leu Thr Gly Thr Thr Ile Glu Phe Cys Leu Val Leu Lys Xaa Tyr Xaa
                                       155
                   150
Cys Glu Leu Phe Ile Ser His Tyr Phe Cys Ser Cys Thr Ser Ile Tyr
                                   170
               165
Asp Ile Asp Arg Thr Ile Phe Phe Phe Thr Xaa Cys Asn Ile Val Val
                                                  190
                              185
Thr Arg Leu Thr Val Val Ser Tyr Ser Phe Leu Ser Ser Ile Leu His
                       200
                                              205
       195
Ile Ser Phe Thr Lys Gly Lys Leu Trp Val Phe Pro Val Gly Leu Thr
                       215
His Ser Cys Cys Cys Leu
<210> 1957
<211> 331
```

```
<212> PRT
<213> Unknown (H38g875 protein)
<220>
<223> Synthetic construct
<221> VARIANT
<222> (1)...(331)
<223> Xaa = Any Amino Acid
<400> 1957
His Thr Glu Pro Arg Asn Leu Thr Ser Val Xaa Glu Phe Leu Leu
                                   10
Gly Leu Ser Glu Asp Pro Glu Leu Gln Pro Leu Leu Ala Leu Leu Ser
                                25
Leu Ser Leu Ser Met His Leu Val Met Val Leu Arg Asn Leu Leu Asn
                            40
                                               45
Ile Leu Ala Val Ser Ser Asp Ser Pro Leu His Thr Pro Thr Tyr Phe
                       55
                                           60
Phe Leu Ser Asn Leu Cys Trp Ala Asp Ile Gly Phe Thr Ser Ala Thr
                    70
                                       75
Val Pro Asn Met Ile Val Asp Met Gln Ser His Ser Arg Val Ile Ser
                                   90
His Ala Asp Cys Leu Thr Gln Ile Ser Phe Leu Leu Phe Ala Cys
            100
                                105
                                                   110
Ile Glu Gly Met Leu Leu Thr Val Met Thr Tyr Asp Cys Phe Val Ala
        115
                            120
                                               125
Ile Cys Cys Pro Leu His Tyr Pro Val Ile Val Asn Pro His Leu Cys
                                           140
    130
                       135
Val Phe Phe Val Leu Val Ser Phe Phe Leu Ser Leu Leu Asp Ser Gln
                    150
                                       155
Leu His Ser Trp Ile Val Leu Gln Phe Thr Ile Ile Lys Asn Val Glu
               165
                                   170
Ile Ser Asn Ser Val Cys Asp Pro Ser Gln Leu Leu Lys Leu Ala Cys
  180
                               185
                                                   190
Ser Asp Ser Val Ile Asn Ser Ile Phe Met His Phe His Asn Thr Met
       195
                           200
                                               205
Phe Gly Phe Leu Pro Ile Ser Gly Ile Leu Val Ser Tyr Tyr Lys Ile
                       215
                                           220
Val Pro Ser Ile Leu Arg Ile Ser Ser Ser Asp Gly Lys Tyr Lys Ala
                   230
                                       235
Phe Ser Thr Cys Gly Ser His Leu Ala Val Val Cys Xaa Phe Tyr Gly
               245
                                   250
Thr Gly Ile Gly Val Tyr Leu Thr Ser Ala Leu Ser Pro Pro Pro Arg
           260
                               265
Asn Gly Val Val Ala Ser Val Met Tyr Ala Val Val Thr Pro Met Leu
                           280
Asn Leu Phe Ile Tyr Ser Leu Arg Asn Arg Asp Ile Gln Ser Ala Leu
                       295
                                          300
Trp Arg Leu Leu Ser Arg Thr Val Glu Ser His Asp Leu Phe His Pro
                   310
                                       315
Phe Ser Cys Val Gly Lys Gly Asn His Ile Lys
               325
<210> 1958
<211> 322
<212> PRT
<213> Unknown (H38g876 protein)
<223> Synthetic construct
```

```
<221> VARIANT
<222> (1)...(322)
<223> Xaa = Any Amino Acid
<400> 1958
His Arg Glu Pro Arg Asn Leu Thr Gly Val Xaa Glu Phe Leu Leu
                                  10
Gly Leu Ser Glu Asp Pro Glu Leu Gln Pro Ile Leu Ala Leu Leu Ser
                               25
Leu Ser Leu Ser Met Tyr Leu Val Thr Val Leu Arg Asn Leu Leu Ser
                           40
Ile Leu Ala Val Arg Ser Asp Ser Pro Leu His Thr Pro Ile Tyr Phe
Phe Leu Ser Asn Leu Cys Trp Ala Asp Ile Gly Phe Thr Ser Ala Thr
                  70
                                     75
Val Pro Lys Met Ile Val Asp Met Gln Ser His Ser Arg Val Ile Ser
                               90
               85
His Ala Gly Cys Leu Thr Gln Met Ser Phe Leu Val Leu Phe Ala Cys
                   105
           100
Ile Glu Gly Met Leu Leu Thr Val Met Ala Tyr Asp Cys Phe Val Ala
       115
                       120
                                             125
Ile Cys His Pro Leu His Tyr Pro Val Ile Val Asn Pro His Leu Cys
                       135
                                          140
Val Phe Phe Val Leu Val Ser Phe Phe Leu Ser Leu Leu Asp Ser Gln
                                      155
                  150
Leu His Ser Trp Ile Val Leu Gln Phe Thr Ile Ile Lys Asn Val Glu
                                  170
Ile Ser Asn Phe Val Cys Asp Pro Ser Gln Leu Leu Lys Phe Ala Cys
                             185
                                                  190
           180
Ser Asp Ser Ile Ile Asn Ser Ile Phe Ile Tyr Phe His Ser Thr Met
                                              205
                          200
       195
Phe Gly Phe Leu Pro Ile Ser Gly Ile Leu Leu Ser Tyr Tyr Lys Ile
                      215
                                         220
Ile Pro Ser Ile Leu Arg Ile Ser Ser Ser Asp Gly Lys Tyr Lys Ala
                 230
                                      235
Phe Ser Thr Cys Gly Ser His Leu Ala Val Val Cys Xaa Phe Tyr Gly
                                  250
                                                      255
              245
Thr Asp Ile Gly Met Tyr Leu Thr Ser Ala Val Ser Pro Pro Pro Arg
                                                 270
           260
                              265
Asn Gly Val Val Ala Ser Val Met Tyr Ala Val Val Thr Pro Met Leu
                          280
       275
Asn Leu Phe Ile Tyr Ser Leu Arg Asn Arg Asp Ile Gln Ser Ala Leu
                      295
                                          300
Trp Gly Leu His Ser Arg Thr Val Glu Ser His Asp Leu Phe His Pro
305
                 310
                                      315
Phe Ser
<210> 1959
<211> 315
<212> PRT
<213> Unknown (H38g877 protein)
<220>
```

10

Met Gln Pro Glu Ser Gly Ala Asn Gly Thr Val Ile Ala Glu Phe Ile

Leu Leu Gly Leu Leu Glu Ala Pro Gly Leu Gln Pro Val Val Phe Val

<223> Synthetic construct

<400> 1959

```
25
Leu Phe Leu Phe Ala Tyr Leu Val Thr Val Arg Gly Asn Leu Ser Ile
                            40
Leu Ala Ala Val Leu Val Glu Pro Lys Leu His Thr Pro Met Tyr Phe
                       55
Phe Leu Gly Asn Leu Ser Val Leu Asp Val Gly Cys Ile Ser Val Thr
                   70
Val Pro Ser Met Leu Ser Arg Leu Leu Ser Arg Lys Arg Ala Val Pro
                                    90
Cys Gly Ala Cys Leu Thr Gln Leu Phe Phe Phe His Leu Phe Val Gly
                               105
           100
Val Asp Cys Phe Leu Leu Thr Ala Met Ala Tyr Asp Gln Phe Leu Ala
                           120
Ile Cys Arg Pro Leu Thr Tyr Ser Thr Arg Met Ser Gln Thr Val Gln
                                           140
                       135
Arg Met Leu Val Ala Ala Ser Trp Ala Cys Ala Phe Thr Asn Ala Leu
                   150
                                        155
Thr His Thr Val Ala Met Ser Thr Leu Asn Phe Cys Gly Pro Asn Val
                                   170
               165
Ile Asn His Phe Tyr Cys Asp Leu Pro Gln Leu Phe Gln Leu Ser Cys
                               185
           180
Ser Ser Thr Gln Leu Asn Glu Leu Leu Leu Phe Ala Val Gly Phe Ile
                            200
Met Ala Gly Thr Pro Met Ala Leu Ile Val Ile Ser Tyr Ile His Val
                        215
Ala Ala Ala Val Leu Arg Ile Arg Ser Val Glu Gly Arg Lys Lys Ala
                                        235
                    230
Phe Ser Thr Cys Gly Ser His Leu Thr Val Val Ala Ile Phe Tyr Gly
                                    250
Ser Gly Ile Phe Asn Tyr Met Arg Leu Gly Ser Thr Lys Leu Ser Asp
                                265
Lys Asp Lys Ala Val Gly Ile Phe Asn Thr Val Ile Asn Pro Met Leu
                           280
Asn Pro Ile Ile Tyr Ser Phe Arg Asn Pro Asp Val Gln Ser Ala Ile
                       295
Trp Arg Met Leu Thr Gly Arg Arg Ser Leu Ala
<210> 1960
<211> 323
<212> PRT
<213> Unknown (H38g878 protein)
<220>
<223> Synthetic construct
<400> 1960
Met Thr Asp Tyr Asn Glu Pro Met Glu Pro Met Glu Asp Lys Asn Gln
                                    10
Thr Val Val Thr Glu Phe Leu Leu Leu Gly Leu Thr Asp His Pro Tyr
                                25
Gln Lys Ile Val Leu Phe Phe Met Phe Leu Phe Val Tyr Leu Ile Thr
                            40
Leu Gly Gly Asn Leu Gly Met Ile Thr Leu Ile Trp Ile Asp Pro Arg
                        55
Leu His Thr Pro Met Tyr Phe Phe Leu Arg His Leu Ser Phe Val Asp
                                        75
                    70
Ile Cys Ser Ser Ser Ser Val Val Pro Lys Met Leu Cys Asn Ile Phe
                                   90
               85
Ala Glu Lys Lys Asp Ile Thr Phe Leu Gly Cys Ala Ala Gln Met Trp
                              105
```

```
Phe Phe Gly Leu Phe Glu Ala Ala Glu Cys Phe Leu Leu Ala Ala Met
                            120
       115
Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu Leu Tyr Thr Leu
                        135
                                            140
Ile Met Ser Gln Gln Val Cys Met Gln Leu Val Val Gly Pro Tyr Ala
                                       155
                   150
Met Ala Leu Ile Ser Thr Met Thr His Thr Ile Phe Thr Phe Cys Leu
                                                        175
                                   170
               165
Pro Phe Cys Gly Ser Asn Ile Ile Asn His Phe Phe Cys Asp Ile Phe
                               185
           180
Pro Leu Leu Ser Leu Ala Cys Ala Asp Thr Trp Val Asn Lys Phe Val
                                               205
                            200
       195
Leu Phe Val Leu Ala Gly Ala Ile Gly Val Leu Ser Gly Leu Ile Ile
                                           220
                        215
Met Val Ser Tyr Ile Cys Ile Leu Met Thr Ile Leu Lys Ile Gln Thr
                   230
                                        235
Ala Asp Gly Lys Gln Lys Ala Phe Phe Thr Cys Phe Ser His Leu Ala
               245
                                   250
Ala Val Ser Ile Leu Tyr Gly Thr Leu Phe Leu Ile Tyr Val Arg Pro
                               265
Ser Ser Ser Ser Leu Gly Ile Tyr Lys Val Ile Ser Leu Phe Tyr
                                               285
                            280
       275
Thr Val Val Ile Pro Met Val Asn Pro Leu Ile Tyr Ser Leu Arg Asn
                                            300
                        295
Lys Glu Val Lys Asp Ala Phe Arg Arg Lys Ile Glu Arg Lys Lys Phe
                                        315
                   310
Ile Ile Gly
```

```
<210> 1961
```

## <220>

<223> Synthetic construct

## <221> VARIANT

<222> (1)...(229)

<223> Xaa = Any Amino Acid

## <400> 1961

Phe Phe Ser Leu Asp Leu Ile Arg Ser Gln Ala Asn Thr Met Ser Lys 10 Lys His Trp Thr Ala Ile Ala Glu Phe Ile Pro Leu Gly Pro Thr Asp 25 30 Gln Ala Glu Leu Gln Leu Val Leu Phe Phe Phe Thr Phe Leu Val Ile 40 35 Tyr Leu Ile Met Val Met Gly Asn Leu Ser Met Ile Leu Ile Ile Arg 55 Ser Asp Xaa Lys Leu His Ile Pro Met Tyr Phe Phe Leu Ser His Leu 70 75 Ser Phe Ala Val Leu Cys Tyr Thr Leu Asn Val Thr Pro Gln Ile Leu 90 85 Val Asn Phe Leu Ser Lys Arg Lys Thr Ile Phe Phe Ile Gly Cys Val 105 110 100 Ser Val Leu Xaa Phe Tyr Phe Phe Ile Val Leu Ile Ile Arg Asp Tyr 120 125 115 His Met Leu Thr Val Met Ala Asn Asp Cys Tyr Met Ala Ile Cys Lys 135 140 Pro Leu Leu Tyr Gly Ser Lys Met Ser Arg Phe Val Cys Leu Ser Leu

<sup>&</sup>lt;211> 229

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Unknown (H38g879 protein)

```
150
                                        155
Ala Ser Val Ser Xaa Ile Tyr Gly Phe Ala Asn Tyr Leu Ala Gln Thr
               165
                                  170
Ile Arg Met Leu Leu Ser Phe Xaa Gly Ser Asn Glu Ile Asn His
                               185
                                                    190
            180
Phe Asp Cys Ala Asp Pro Pro Leu Leu Val Leu Pro Cys Ala Gly Thr
        195
                        200
                                               205
Cys Val Lys Xaa Ile Ile Met Leu Met Glu Pro His Cys Leu Leu Lys
   210
                       215
Pro Gly Tyr Ile Leu
<210> 1962
<211> 286
<212> PRT
<213> Unknown (H38g880 protein)
<220>
<223> Synthetic construct
<400> 1962
Met Tyr Leu Val Thr Val Leu Arg Asn Leu Leu Ser Ile Leu Ala Val
Ser Ser Asp Ser His Pro His Thr Pro Met Tyr Phe Phe Leu Ser Asn
            20
                                25
Leu Cys Trp Ala Asp Ile Gly Phe Thr Leu Ala Thr Val Pro Lys Met
                            40
Ile Val Asp Met Gly Ser His Ser Arg Val Ile Ser Tyr Gly Gly Cys
                       55
Leu Thr Gln Met Ser Phe Leu Val Leu Phe Ala Cys Ile Val Asp Met
                    70
                                       75
Phe Leu Thr Val Met Ala Tyr Asp Cys Phe Val Ala Ile Cys Arg Pro
               85
                                   90
Leu His Tyr Pro Val Ile Val Asn Pro His Leu Cys Val Phe Phe Val
           100
                               105
Leu Val Ser Phe Phe Leu Ser Leu Leu Asp Ser Gln Leu His Ser Trp
        115
                           120
                                               125
Ile Val Leu Gln Phe Thr Phe Phe Lys Asn Val Glu Ile Ser Asn Phe
                       135
Val Cys Glu Pro Ser Gln Leu Leu Lys Leu Ala Ser Tyr Asp Ser Val
                   150 ... 155
Ile Asn Ser Ile Phe Ile Tyr Phe Asp Asn Thr Met Phe Gly Phe Leu
                                   170
               165
Pro Ile Ser Gly Ile Leu Leu Ser Tyr Tyr Lys Ile Val Pro Ser Ile
                               185
Leu Arg Ile Ser Ser Ser Asp Gly Lys Tyr Lys Ala Phe Ser Ala Cys
                           200
Gly Cys His Leu Ala Val Val Cys Leu Phe Tyr Gly Thr Gly Ile Gly
                       215
                                           220
Val Tyr Leu Thr Ser Ala Val Ala Pro Pro Leu Arg Asn Gly Met Val
                   230
                                       235
Ala Ser Val Met Tyr Ala Val Val Thr Pro Met Leu Asn Pro Phe Ile
               245
                                   250
Tyr Ser Leu Arg Asn Arg Asp Ile Gln Ser Ala Leu Trp Arg Val Cys
                               265
Asn Lys Thr Val Glu Ser His Asp Leu Phe His Pro Phe Ser
                           280
<210> 1963
<211> 325
<212> PRT
```

1136

```
<213> Unknown (H38g881 protein)
<223> Synthetic construct
<221> VARIANT
<222> (1)...(325)
<223> Xaa = Any Amino Acid
<400> 1963
Met Ala Asn Glu Asn Tyr Thr Lys Val Thr Xaa Phe Ile Phe Thr Gly
                            10
        5
Leu Asn Tyr Asn Pro Gln Leu Arg Val Phe Leu Phe Leu Phe Leu
                               25
        20
Thr Thr Phe Tyr Val Ile Asn Val Thr Gly Asn Leu Gly Met Ile Val
                          40
                                             45
Leu Ile Arg Ile Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu
                   55
Ser His Leu Ser Phe Val Asp Thr Cys Phe Ser Ser Val Val Ser Pro
65
                   70
Lys Met Leu Thr Asp Phe Phe Val Lys Arg Lys Ala Ile Ser Phe Leu
                                  90
Gly Cys Ala Leu Gln Gln Trp Phe Phe Gly Phe Phe Val Ala Ala Asp
           100
                               105
Cys Phe Leu Leu Glu Ser Met Ala Tyr Asp Cys Tyr Val Ala Ile Cys
                           120
                                             125
       115
Asn Pro Leu Leu Tyr Ser Val Ala Met Ser Gln Arg Leu Cys Ile Gln
                      135
                                          140
Leu Val Val Gly Pro Tyr Val Ile Gly Leu Met Asn Thr Met Thr His
        . 150
                                      155
Thr Thr Asn Ala Phe Cys Leu Pro Phe Cys Gly Pro Asn Val Ile Asn
                                  170
                                                      175
               165
Pro Phe Phe Cys Asp Met Ser Pro Leu Leu Ser Leu Val Cys Ala Asp
                                                 190
           180
                              185
Thr Arg Leu Asn Lys Leu Ala Val Phe Ile Val Ala Gly Ala Val Gly
                                              205
       195
                          200
Val Phe Ser Gly Leu Thr Ile Leu Ile Ser Tyr Ile Tyr Ile Leu Met
                                         220
                      215
Ala Ile Leu Arg Ile Arg Ser Ala Asp Gly Arg Cys Lys Thr Phe Ser
                                      235
                  230
Thr Cys Ser Ser His Leu Thr Ala Val Phe Ile Ser Tyr Gly Thr Leu
               245
                                   250
Phe Phe Ile Tyr Val His Pro Ser Ala Thr Phe Ser Leu Asp Leu Asn
                                                 270
           260
                               265
Lys Val Val Ser Val Phe Tyr Thr Ala Val Ile Pro Met Leu Asn Pro
                          280
       275
Leu Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Asp Ala Ile His Arg
                       295
                                          300
Thr Val Thr Gln Arg Lys Phe Cys Lys Ala Xaa Ile Leu Ile Gln Lys
                                      315
                   310
Glu Leu Gly Arg Lys
<210> 1964
<211> 314
<212> PRT
<213> Unknown (H38g882 protein)
<220>
```

<223> Synthetic construct

```
<221> VARIANT
<222> (1)...(314)
<223> Xaa = Any Amino Acid
<400> 1964
Met Glu Thr Glu Asn Asn Thr Thr Val Thr Glu Phe Ile Ile Leu Gly
               5
                                    10
Leu Thr Asp Asn Pro Met Leu Cys Ala Ile Phe Phe Val Phe Phe Leu
           20
                               25
Ala Val Tyr Ile Val Thr Ile Pro Gly Asn Ile Ser Ile Ile Leu Leu
        35
                            40
Ile Gln Ser Ser Pro Gln Leu His Thr Leu Met Tyr Leu Phe Leu Ser
His Leu Ala Ser Val Asp Ile Gly Tyr Ser Ile Ser Val Thr Pro Ile
                    70
Ile Leu Ile Asn Phe Leu Arg Glu Lys Thr Thr Ile Pro Val Thr Gly
                                    90
Cys Ile Ala Gln Leu Gly Ser Asp Val Met Phe Gly Thr Thr Glu Cys
                               105
Phe Leu Leu Asp His Tyr Val Ala Ile Cys Ser Pro Leu Leu Tyr Ser
                           120
                                                125
Ile Gln Met Pro Pro Val Val Cys Phe Leu Leu Gly Ala Ser Tyr
                       135
                                            140
Leu Gly Gly Cys Leu Asn Ala Ser Ser Phe Thr Gly Cys Leu Met Asn
                   150
                                        155
Leu Ser Phe Cys Gly Pro Asn Lys Ile Asn His Phe Phe Cys Asp Leu
               165
                                    170
Phe Pro Leu Lys Leu Ser Cys Gly His Val Tyr Ile Ala Glu Ile
                               185
Ser Pro Ala Ile Ser Ser Ala Ser Val Leu Ile Ser Thr Leu Phe Thr
                           200
                                                205
Ile Ile Val Ser Tyr Ile Tyr Ile Leu His Ser Ile Leu Lys Val Cys
                       215
                                            220
Ser Thr Glu Gly Arg Lys Lys Ala Phe Ser Thr Cys Ala Ser His Leu
                   230
                                        235
Thr Ala Val Thr Leu Phe Tyr Gly Thr Ile Leu Phe Val Tyr Val Met
               245
                                    250
Pro Lys Ser Ser Tyr Ser Ala Asp Gln Val Lys Val Ala Phe Val Ile
                               265
                                                    270
Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg
                                               285
                           280
Asn Lys Glu Val Lys Glu Ala Met Arg Lys Leu Met Ala Arg Thr His
                                            300
                       295
Trp Phe Ser Xaa Ile Lys Ser Val Xaa Ser
                   310
<210> 1965
<211> 202
<212> PRT
<213> Unknown (H38g883 protein)
<220>
<223> Synthetic construct
<221> VARIANT
<222> (1)...(202)
<223> Xaa = Any Amino Acid
<400> 1965
Ile Phe Ala Ile Leu Thr Thr Ile Asp Cys Cys Val Phe Val Trp Glu
                5
```

```
Phe Leu Glu Cys Thr Val Phe Val Asn Lys Arg Ala Cys Ala Gln Leu
                                25
Ala Cys Gly Ala Phe Cys Ile Gly Leu Ile Met Thr Val Val Xaa Ile
                           40
Thr Thr Val Ser Gln Arg Tyr Lys Arg Ser Thr Tyr Ala Ile Val Asp
                       55
Cys Phe Leu Phe Asp Thr Leu Leu Val Met Lys Leu Ser Cys Ile Asp
                   70
Asn Thr Ile Tyr Glu Ile Ile Gln Tyr Phe Ile His His Thr Cys Val
                                   90
Gln Val Ser Met Gly Leu Val Cys Ile Ser Tyr Ile Asp Ile Pro Val
           100
                               105
Thr Ser Ile Val Leu Arg Ile Ser Xaa Ser Glu Val Phe Ala Thr Cys
                           120
Val Pro Gln Pro Pro Pro His His Gly His Cys Leu Tyr Val Cys Ala
                      135
Cys Thr Ala Tyr Leu Lys His Lys Pro Met Asn Ser Ile Glu Lys Gly
                  150
                                       155
Leu Leu Xaa Glu Thr Tyr Ile Ile Ile Ile His Ser Ala Ser Gly Pro
                                   170
               165
Val Val Tyr Thr Leu Arg Tyr Met Glu Ala Lys Asp Thr Met Tyr Arg
                               185
Ala Val Asp Arg Asn Ile Ser Xaa Gln Ile
                           200
```

<210> 1966

<211> 315

<212> PRT

<213> Unknown (H38g884 protein)

<220>

<223> Synthetic construct

<400> 1966

Met Glu Pro Glu Ala Gly Thr Asn Arg Thr Ala Val Ala Glu Phe Ile 10 Leu Leu Gly Leu Val Gln Thr Glu Glu Met Gln Pro Val Val Phe Val 20 25 Leu Leu Leu Phe Ala Tyr Leu Val Thr Thr Gly Gly Asn Leu Ser Ile 40 Leu Ala Ala Val Leu Val Glu Pro Lys Leu His Ala Pro Met Tyr Phe 55 60 Phe Leu Gly Asn Leu Ser Val Leu Asp Val Gly Cys Ile Thr Val Thr 70 75 Val Pro Ala Met Leu Gly Arg Leu Leu Ser His Lys Ser Thr Ile Ser 90 Tyr Asp Ala Cys Leu Ser Gln Leu Phe Phe His Leu Leu Ala Gly 100 105 110 Met Asp Cys Phe Leu Leu Thr Ala Met Ala Tyr Asp Arg Leu Leu Ala 125 120 Ile Cys Gln Pro Leu Thr Tyr Ser Thr Arg Met Ser Gln Thr Val Gln 135 140 Arg Met Leu Val Ala Ala Ser Leu Ala Cys Ala Phe Thr Asn Ala Leu 150 155 Thr His Thr Val Ala Met Ser Thr Leu Asn Phe Cys Gly Pro Asn Glu 170 165 Val Asn His Phe Tyr Cys Asp Leu Pro Gln Leu Phe Gln Leu Ser Cys 180 185 190 Ser Ser Thr Gln Leu Asn Glu Leu Leu Leu Phe Ala Val Gly Phe Ile 205 . 195 200 Met Ala Gly Thr Pro Leu Val Leu Ile Ile Thr Ala Tyr Ser His Val

```
215
                                            220
Ala Ala Ala Val Leu Arg Ile Arg Ser Val Glu Gly Arg Lys Lys Ala
                   230
                                        235
Phe Ser Thr Cys Gly Ser His Leu Thr Val Val Cys Leu Phe Phe Gly
                245
                                    250
Arg Gly Ile Phe Asn Tyr Met Arg Leu Gly Ser Glu Glu Ala Ser Asp
            260
                                265
Lys Asp Lys Gly Val Gly Val Phe Asn Thr Val Ile Asn Pro Met Leu
                            280
                                                285
Asn Pro Leu Ile Tyr Ser Leu Arg Asn Pro Asp Val Gln Gly Ala Leu
                        295
Trp Gln Ile Phe Leu Gly Arg Arg Ser Leu Thr
                    310
<210> 1967
<211> 309
<212> PRT
<213> Unknown (H38g885 protein)
<220>
<223> Synthetic construct
Met Lys Arg Lys Asn Phe Thr Glu Val Ser Glu Phe Ile Phe Leu Gly
                                    10
Phe Ser Ser Phe Gly Lys His Gln Ile Thr Leu Phe Val Val Phe Leu
                                25
Thr Val Tyr Ile Leu Thr Leu Val Ala Asn Ile Ile Ile Val Thr Ile
                            40
                                                45
Ile Cys Ile Asp His His Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                        55
                                            60
Met Leu Ala Ser Ser Glu Thr Val Tyr Thr Leu Val Ile Val Pro Arg
                    70
                                        75
Met Leu Leu Ser Leu Ile Phe His Asn Gln Pro Ile Ser Leu Ala Gly
                                    90
Cys Ala Thr Gln Met Phe Phe Phe Val Ile Leu Ala Thr Asn Asn Cys
            100
                                105
Phe Leu Leu Thr Ala Met Gly Tyr Asp Arg Tyr Val Ala Ile Cys Arg
                            120
Pro Leu Arg Tyr Thr Val Ile Met Ser Lys Gly Leu Cys Ala Gln Leu
                        135
                                            140
Val Cys Gly Ser Phe Gly Ile Gly Leu Thr Met Ala Val Leu His Val
                    150
                                        155
Thr Ala Met Phe Asn Leu Pro Phe Cys Gly Thr Val Val Asp His Phe
                                    170
Phe Cys Asp Ile Tyr Pro Val Met Lys Leu Ser Cys Ile Asp Thr Thr
                                185
Ile Asn Glu Ile Ile Asn Tyr Gly Val Ser Ser Phe Val Ile Phe Val
                            200
                                                205
Pro Ile Gly Leu Ile Phe Ile Ser Tyr Val Leu Val Ile Ser Ser Ile
                        215
                                            220
Leu Gln Ile Ala Ser Ala Glu Gly Arg Lys Lys Thr Phe Ala Thr Cys
                   230
                                        235
Val Ser His Leu Thr Val Val Ile Val His Cys Gly Cys Ala Ser Ile
               245
                                    250
Ala Tyr Leu Lys Pro Lys Ser Glu Ser Ser Ile Glu Lys Asp Leu Val
           260
                                265
                                                    270
Leu Ser Val Thr Tyr Thr Ile Ile Thr Pro Leu Leu Asn Pro Val Val
                            280
                                                285
Tyr Ser Leu Arg Asn Lys Glu Val Lys Asp Ala Leu Cys Arg Val Val
    290
                        295
                                            300
```

```
Gly Arg Asn Ile Ser
<210> 1968
<211> 320
<212> PRT
<213> Unknown (H38g886 protein)
<223> Synthetic construct
<400> 1968
Met Leu Gln Arg Val Gly Glu Met Asp Gly Gly Asn Gln Ser Glu Gly
1 5
                          10
Ser Glu Phe Leu Leu Gly Ile Ser Glu Ser Pro Glu Gln Gln
                              25
Met Leu Phe Trp Met Phe Leu Val Arg Tyr Leu Val Thr Val Leu Gly
                                              45
                          40
Asn Val Leu Ile Ile Leu Ala Ile Ser Ser Asp Ser Arg Leu His Thr
                       55
Pro Met Tyr Phe Phe Leu Ala Asn Leu Ser Phe Thr Asp Leu Phe Phe
                   70
                                       75
Val Thr Asn Thr Ile Pro Lys Met Leu Val Asn Leu Gln Ser Gln Asn
               85
                                  90
Lys Ala Ile Ser Tyr Thr Gly Cys Leu Thr Gln Leu Tyr Phe Leu Val
                               105
           100
Ser Leu Val Ala Leu Asp Asn Leu Asn Leu Ala Val Met Ala Tyr Asp
                          120
                                              125
Arg Tyr Val Ala Ile Cys Arg Pro Leu His Tyr Val Thr Ala Met Ile
                      135
                                          140
Pro Gly Leu Cys Ile Leu Leu Ser Leu Cys Trp Val Phe Ser Ala
                                      155
                   150
Leu Tyr Gly Leu Ile His Ile Leu Leu Met Thr Arg Val Thr Phe Cys
               165
                                  170
Gly Ser Gln Lys Ile His Tyr Leu Phe Cys Glu Met Tyr Phe Leu Leu
          180
                              185
Arg Leu Ala Cys Ser Asn Ile His Val Asn His Thr Val Leu Val Ala
                                              205
                          200
Thr Gly Cys Phe Ile Phe Leu Ile Pro Leu Gly Phe Met Ile Thr Ser
                      215
                                          220
Tyr Ala Arg Ile Val Arg Ala Ile Leu Gln Ile Pro Ser Ala Thr Gly
                   230
                                      235
Lys Tyr Lys Ala Phe Ser Thr Cys Ala Ser His Leu Ala Val Val Ser
                                   250
               245
Leu Phe Tyr Gly Thr Leu Gly Met Val Tyr Leu Gln Pro Leu Gln Thr
                               265
           260
Tyr Ser Met Lys Asp Ser Val Ala Thr Val Met Tyr Ala Val Val Thr
                           280
                                              285
Pro Met Ile Asn Pro Phe Ile Tyr Ser Leu Arg Asn Lys Asp Met His
                                          300
                      295
Gly Ala Leu Gly Arg Leu Arg Gln Gly Lys Ala Phe Gln Lys Leu Thr
<210> 1969
<211> 276
<212> PRT
<213> Unknown (H38g887 protein)
<223> Synthetic construct
```

```
<400> 1969
Met Arg Arg Lys Asn Leu Thr Glu Val Thr Glu Phe Val Phe Leu Gly
Phe Ser Arg Phe His Lys His His Ile Thr Leu Phe Val Val Phe Leu
           20
Ile Leu Tyr Thr Leu Thr Val Ala Gly Asn Ala Ile Ile Met Thr Ile
                           40
Ile Cys Ile Asp Arg His Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                                          60
                       55
Met Leu Ala Ser Ser Lys Thr Val Tyr Thr Leu Phe Ile Ile Pro Gln
                                       75
                   70
Met Leu Ser Ser Phe Val Thr Gln Thr Gln Pro Ile Ser Leu Ala Gly
                                   90
               85
Cys Thr Thr Gln Thr Phe Phe Phe Val Thr Leu Ala Ile Asn Asn Cys
                               105
Phe Leu Leu Thr Val Met Gly Tyr Asp His Tyr Met Ala Ile Cys Asn
                           120
Pro Leu Arg Tyr Arg Val Ile Thr Ser Lys Lys Val Cys Val Gln Leu
                                           140
                       135
Val Cys Gly Ala Phe Ser Ile Gly Leu Ala Met Ala Ala Val Gln Val
                   150
Thr Ser Ile Phe Thr Leu Pro Phe Cys His Thr Val Val Gly His Phe
               165
                                   170
Phe Cys Asp Ile Leu Pro Val Met Lys Leu Ser Cys Ile Asn Thr Thr
                                                   190
                               185
Ile Asn Glu Ile Ile Asn Phe Val Val Arg Leu Phe Val Ile Leu Val
                            200
Pro Met Gly Leu Val Phe Ile Ser Tyr Val Leu Ile Ile Ser Thr Val
                                           220
                       215
Leu Lys Ile Ala Ser Ala Glu Gly Trp Lys Lys Thr Phe Ala Thr Cys
                                       235
                   230
Ala Phe His Leu Thr Val Val Ile Val His Tyr Gly Cys Ala Ser Ile
                                   250
               245
Ala Tyr Leu Met Pro Lys Ser Glu Asn Ser Ile Glu Gln Asp Leu Leu
                               265
Leu Ser Val Thr
      275
<210> 1970
<211> 312
<212> PRT
<213> Unknown (H38g888 protein)
<220>
<223> Synthetic construct
<400> 1970
Met Asp Gly Asp Asn Gln Ser Glu Asn Ser Gln Phe Leu Leu Gly
                                   10
Ile Ser Glu Ser Pro Glu Gln Gln Gln Ile Leu Phe Trp Met Phe Leu
                                25
            20
Ser Met Tyr Leu Val Thr Val Leu Gly Asn Val Leu Ile Ile Leu Ala
                           40
        35
Ile Ser Ser Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ala
                       55
Asn Leu Ser Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys
                                       75
                   70
Met Leu Val Asn Phe Gln Ser Gln Asn Lys Ala Ile Ser Tyr Ala Gly
                                   90
Cys Leu Thr Gln Leu Tyr Phe Leu Val Ser Leu Val Thr Leu Asp Asn
                               105
```

```
Leu Ile Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Cys
                            120
        115
Pro Leu His Tyr Val Thr Ala Met Ser Pro Gly Leu Cys Val Leu Leu
                        135
                                            140
Leu Ser Leu Cys Trp Gly Leu Ser Val Leu Tyr Gly Leu Leu Leu Thr
                                        155
                    150
Phe Leu Leu Thr Arg Val Thr Phe Cys Gly Pro Arg Glu Ile His Tyr
                                    170
               165
Leu Phe Cys Asp Met Tyr Ile Leu Leu Trp Leu Ala Cys Ser Asn Thr
                                185
            180
His Ile Ile His Thr Ala Leu Ile Ala Thr Gly Cys Phe Ile Phe Leu
                            200
                                                205
Thr Leu Leu Gly Phe Met Thr Thr Ser Tyr Val Arg Ile Val Arg Thr
                                            220
                        215
Ile Leu Gln Met Pro Ser Ala Ser Lys Lys Tyr Lys Thr Phe Ser Thr
                                        235
                   230
Cys Ala Ser His Leu Gly Val Val Ser Leu Phe Tyr Gly Thr Leu Ala
               245
                                   250
Met Val Tyr Leu Gln Pro Leu His Thr Tyr Ser Met Lys Asp Ser Val
                                                   270
                                265
            260
Ala Thr Val Met Tyr Ala Val Leu Thr Pro Met Met Asn Pro Phe Ile
                            280
        275
Tyr Ser Leu Arg Asn Lys Asp Met His Gly Ala Pro Gly Arg Val Leu
                        295
                                            300
Trp Arg Pro Phe Gln Arg Pro Lys
305
                    310
<210> 1971
<211> 299
<212> PRT
<213> Unknown (H38g889 protein)
<220>
<223> Synthetic construct
<221> VARIANT
<222> (1)...(299)
<223> Xaa = Any Amino Acid
<400> 1971
Met Ala Asp Gly Asn Tyr Lys Arg Ile Thr Glu Phe Ile Phe Val Gly
                                    10
Leu Arg Tyr His Leu Gln Leu Gln Val Phe Leu Phe Leu Pro Phe Leu
Pro Phe Tyr Leu Ile Thr Met Thr Glu Asn Leu Gly Met Met Val Arg
        35
                            40
Ile Trp Leu Asp Ser Cys Phe His Thr Pro Met Tyr Phe Val Leu Ser
                        55
Tyr Leu Ser Phe Val Asp Ile Cys Phe Ser Ser Val Val Gly His Lys
                    70
                                        75
Leu Leu Thr Asp Leu Phe Ala Val Arg Lys Ala Ile Ser Phe Leu Gly
                85
                                    90
Cys Pro Leu Gln Gln Trp Phe Phe Gly Phe Phe Val Val Ile Glu Tyr
           100
                                105
Leu Leu Leu Ala Ser Met Ala Tyr Asp Asn Tyr Val Ala Ile Cys Asn
                            120
                                                125
Pro Leu Leu Tyr Ser Val Ala Met Xaa Xaa Arg Leu Cys Ile Gln Leu
                       135
                                            140
Val Val Val Arg Tyr Ala Ala Asp Phe Phe Asn Thr Ile Thr His Thr
                   150
                                       155
```

Thr Ala Ala Phe His Phe Pro Phe Phe His Ser Asn Ile Ile Asn His

```
170
                165
Phe Phe Cys Asp Met Ser Leu Leu Ser Leu Val Cys Ala Asp Ala
                                185
Arg Ile Asn Lys Leu Leu Val Phe Ile Val Ala Gly Ala Val Leu Val
                           200
                                               205
Val Ser Ser Leu Thr Ile Ile Ile Ser Tyr Phe Tyr Ile Leu Thr Asp
                       215
                                            220
Ile Leu Arg Ile Cys Ser Ala Asn Gly Lys Asn Lys Thr Phe Ser Thr
                   230
                                       235
Cys Ser Ser His Leu Thr Ala Val Ser Ile Phe Tyr Gly Ser Leu Phe
                                   250
               245
Phe Ser Tyr Val Arg Pro Gly Ala Thr Phe Tyr Pro Glu Leu Asn Lys
           260
                               265
Ile Val Leu Val Phe Cys Ile Ile Pro Met Leu Lys Pro Leu Ile Tyr
                           280
Ser Leu Ile Asn Lys Glu Val Ser Xaa Pro Leu
                        295
<210> 1972
<211> 311
<212> PRT
<213> Unknown (H38g890 protein)
<220>
<223> Synthetic construct
<400> 1972
Met Glu Lys Ile Asn Asn Val Thr Glu Phe Ile Phe Trp Gly Leu Ser
                                    10
Gln Ser Pro Glu Ile Glu Lys Val Cys Phe Val Val Phe Ser Phe Phe
            20
                               25
Tyr Ile Ile Ile Leu Leu Gly Asn Leu Leu Ile Met Leu Thr Val Cys
Leu Ser Asn Leu Phe Lys Ser Pro Met Tyr Phe Phe Leu Ser Phe Leu
                       55
                                           60
Ser Phe Val Asp Ile Cys Tyr Ser Ser Val Thr Ala Pro Lys Met Ile
                   70
                                       75
Val Asp Leu Leu Ala Lys Asp Lys Thr Ile Ser Tyr Val Gly Cys Met
               85
                                   90
Leu Gln Leu Leu Gly Val His Phe Phe Gly Cys Thr Glu Ile Phe Ile
            100
                               105
Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
       115
                           120
His Tyr Met Thr Ile Met Asn Arg Glu Thr Cys Asn Lys Met Leu Leu
  130
                       135
                                           140
Gly Thr Trp Val Gly Gly Phe Leu His Ser Ile Ile Gln Val Ala Leu
                   150
                                       155
Val Val Gln Leu Pro Phe Cys Gly Pro Asn Glu Ile Asp His Tyr Phe
                                   170
               165
Cys Asp Val His Pro Val Leu Lys Leu Ala Cys Thr Glu Thr Tyr Ile
                               185
Val Gly Val Val Thr Ala Asn Ser Gly Thr Ile Ala Leu Gly Ser
                           200
                                               205
Phe Val Ile Leu Leu Ile Ser Tyr Ser Ile Ile Leu Val Ser Leu Arg
                       215
                                           220
Lys Gln Ser Ala Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Gly Ser
225
                                       235
                   230
His Ile Ala Met Val Val Ile Phe Phe Gly Pro Cys Thr Phe Met Tyr
                245
                                   250
Met Arg Pro Asp Thr Thr Phe Ser Glu Asp Lys Met Val Ala Val Phe
                               265
```

```
Tyr Thr Ile Ile Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg
                                               285
                           280
Asn Ala Glu Val Lys Asn Ala Met Lys Lys Leu Trp Gly Arg Asn Val
                      295
Phe Leu Glu Ala Lys Gly Lys
                   310
<210> 1973
<211> 318
<212> PRT
<213> Unknown (H38g891 protein)
<220>
<223> Synthetic construct
<221> VARIANT
<222> (1)...(318)
<223> Xaa = Any Amino Acid
<400> 1973
Met Asp Tyr Arg Asn Gln Thr Leu Val Thr Glu Phe Phe Ser Val Gly
                           10
Leu Thr Asn Leu Phe Gln His Lys Ile Ala Leu Phe Leu Val Phe Leu
                               25
Phe Val Tyr Leu Val Thr Val Pro Gly Asn Leu Gly Met Ile Thr Leu
    35
                          40
Ile Trp Met Asp Ser Arg Leu Gln Thr Pro Lys Tyr Phe Ser Leu Cys
                                           60
                       55
His Leu Ser Phe Val Asp Val Cys Ser Ser Ser Ala Ile Gly Pro Lys
                                      75
                   70
Met Leu Thr Asp Ile Phe Val Glu Lys Lys Val Ile Ser Phe Gly Cys
                                   90
Val Ala Gln Leu Trp Phe Phe Gly His Phe Val Val Thr Glu Cys Phe
                              105
Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Met Ala Ile Tyr Lys Pro
                                               125
                          120
Leu Leu Tyr Thr Leu Ile Met Ser Gln Gln Val Cys Val Gln Leu Val
                       135
Val Gly Pro Tyr Ala Val Gly Leu Ile Ser Thr Met Thr His Met Thr
                   150
                                       155
Phe Thr Phe Arg Leu Leu Tyr Cys Gly Pro Asn Ile Ile Asn His Phe
               165
                                  170
Phe Cys Asp Leu Leu Pro Val Leu Ser Leu Ala Tyr Ala Asp Thr His
                                                  190
          180
                               185
Ile Asn Lys Cys Leu Leu Phe Ile Leu Val Gly Ala Leu Gly Val Leu
                                               205
      195
                          200
Ser Gly Val Ile Ile Leu Val Ser Tyr Ile Tyr Ile Val Ile Ala Ile
                      215
                                           220
Leu Arg Ile Arg Ser Ala Asp Ala Arg Arg Lys Asp Phe Ser Thr Cys
                  230
                                       235
Ser Ser His Leu Met Ala Val Ser Ile Leu Tyr Gly Thr Leu Phe Phe
                                   250
               245
Ile Cys Val Cys Pro Ser Ser Ser Phe Ser Ile Asn Ile Asn Lys Val
                               265
           260
Val Ser Leu Phe Tyr Thr Ala Val Ile Pro Met Leu Asn Pro Leu Ile
                           280
Tyr Ser Leu Arg Asn Lys Glu Val Lys Asp Ser Phe Ser Lys Lys Phe
                                          300
                       295
Glu Arg Lys Lys Phe Leu Ile Gly Arg Xaa Thr Arg Ile Pro
                   310
                                       315
```

```
<210> 1974
<211> 310
<212> PRT
<213> Unknown (H38g892 protein)
<220>
<223> Synthetic construct
<221> VARIANT
<222> (1)...(310)
<223> Xaa = Any Amino Acid
<400> 1974
Met Val Asn Phe Thr His Val Ser Glu Phe Val Leu Leu Gly Phe Gln
Gly Gly Pro Gly Met Gln Ala Met Leu Phe Leu Ile Phe Leu Ile Leu
                               25
Tyr Gly Ile Ala Val Val Gly Asn Leu Gly Met Ile Val Ile Ile Trp
                            40
Val Asp Ala His Leu His Thr Pro Met Tyr Ala Phe Leu Gln Ser Leu
                                            60
                       55
Ser Leu Leu Asp Ile Cys Tyr Ser Ser Thr Ile Ala Pro Arg Ala Leu
                                        75
                   70
Ala Asn Ser Met Gln Glu Asp His Thr Ile Ser Phe Gly Gly Cys Ala
                                    90
                85
Ala Gln Phe Phe Leu Ser Leu Phe Gly Ile Thr Glu Ala Phe Leu
                                105
Leu Ala Ala Met Ala Tyr Asp Arg Phe Ile Ala Ile Cys Asn Pro Leu
                            120
                                                125
Leu Tyr Ser Val Ser Met Ser His Gln Val Cys Val Leu Leu Ile Ser
    130
                        135
                                            140
Gly Ser Tyr Leu Trp Gly Val Val Asn Ala Ile Ala Gln Thr Thr Met
                                        155
                    150
Thr Phe Arg Leu Pro Phe Cys Gly Ser Asn Glu Ile Asn Asp Phe Phe
                                    170
                165
Cys Asp Val Pro Pro Leu Leu Ser Leu Ser Cys Ser Asp Thr Phe Ile
                                185
Asn Gln Leu Val Leu Gly Leu Cys Gly Ser Ile Ile Val Ser Thr
                            200
                                                205
Phe Leu Ile Val Leu Val Ser Tyr Ile Tyr Ile Ile Ser Thr Ile Leu
                        215
                                            220
Arg Ile Pro Thr Met Gln Gly Arg Xaa Lys Ala Phe Ser Thr Cys Ala
                   230
                                        235
Ser His Leu Thr Gly Val Cys Leu Phe Phe Gly Thr Val Phe Phe Met
               245
                                   250
Tyr Ala Gln Pro Ser Ala Ile Phe Phe Met Glu Gln Ser Lys Ile Val
                               265
           260
Ser Ile Phe Tyr Thr Met Val Ile Pro Met Leu Asn Pro Leu Ile Tyr
                            280
Ser Leu Arg Asn Lys Glu Val Lys Gln Ala Leu Arg Arg Ser Met Gln
                       295
                                            300
Lys Leu Ser Leu Xaa Ser
<210> 1975
<211> 309
<212> PRT
<213> Unknown (H38g893 protein)
<220>
<223> Synthetic construct
```

```
Met Arg Glu Asn Asn Gln Ser Ser Thr Leu Glu Phe Ile Leu Leu Gly
Val Thr Gly Gln Gln Glu Gln Glu Asp Phe Phe Tyr Ile Leu Phe Leu
                                25
Phe Ile Tyr Pro Ile Thr Leu Ile Gly Asn Leu Leu Ile Val Leu Ala
                           40
                                               45
Ile Cys Ser Asp Val Arg Leu His Asn Pro Met Tyr Phe Leu Leu Ala
                                            60
                       55
Asn Leu Ser Leu Val Asp Ile Phe Phe Ser Ser Val Thr Ile Pro Lys
                    70
                                        75
Met Leu Ala Asn His Leu Leu Gly Ser Lys Ser Ile Ser Phe Gly Gly
               85
Cys Leu Thr Gln Met Tyr Phe Met Ile Ala Leu Gly Asn Thr Asp Ser
            100
                                105
Tyr Ile Leu Ala Ala Met Ala Tyr Asp Arg Ala Val Ala Ile Ser His
                                               125
                           120
Pro Leu His Tyr Thr Thr Ile Met Ser Pro Arg Ser Cys Ile Trp Leu
                       135
Ile Ala Gly Ser Trp Val Ile Gly Asn Ala Asn Ala Leu Pro His Thr
                                       155
                   150
Leu Leu Thr Ala Ser Leu Ser Phe Cys Gly Asn Gln Glu Val Ala Asn
                                   170
               165
Phe Tyr Cys Asp Ile Thr Pro Leu Leu Lys Leu Ser Cys Ser Asp Ile
                               185
           180
His Phe His Val Lys Met Met Tyr Leu Gly Val Gly Ile Phe Ser Val
                                                205
                            200
Pro Leu Leu Cys Ile Ile Val Ser Tyr Ile Arg Val Phe Ser Thr Val
                                            220
                        215
Phe Gln Val Pro Ser Thr Lys Gly Val Leu Lys Ala Phe Ser Thr Cys
                                        235
                    230
Gly Ser His Leu Thr Val Val Ser Leu Tyr Tyr Gly Thr Val Met Gly
                                    250
Thr Tyr Phe Arg Pro Leu Thr Asn Tyr Ser Leu Lys Asp Ala Val Ile
                                                    270
                                265
Thr Val Met Tyr Thr Ala Val Thr Pro Met Leu Asn Pro Phe Ile Tyr
                           280
                                                285
Ser Leu Arg Asn Arg Asp Met Lys Ala Ala Leu Arg Lys Leu Phe Asn
                                            300
                        295
Lys Arg Ile Ser Ser
<210> 1976
<211> 309
<212> PRT
<213> Unknown (H38g894 protein)
<220>
<223> Synthetic construct
<400> 1976
Met Lys Lys Glu Asn Gln Ser Phe Asn Leu Asp Phe Ile Leu Leu Gly
                                    10
Val Thr Ser Gln Gln Glu Gln Asn Asn Val Phe Phe Val Ile Phe Leu
                                25
Cys Ile Tyr Pro Ile Thr Leu Thr Gly Asn Leu Leu Ile Ile Leu Ala
       35
                            40
Ile Cys Ala Asp Ile Arg Leu His Asn Pro Met Tyr Phe Leu Leu Ala
                                            60
Asn Leu Ser Leu Val Asp Ile Ile Phe Ser Ser Val Thr Ile Pro Lys
```

<400> 1975

```
70
                                       75
Val Leu Ala Asn His Leu Leu Gly Ser Lys Phe Ile Ser Phe Gly Gly
                                   90
               85
Cys Leu Met Gln Met Tyr Phe Met Ile Ala Leu Ala Lys Ala Asp Ser
                               105
            100
Tyr Thr Leu Ala Ala Met Ala Tyr Asp Arg Ala Val Ala Ile Ser Cys
        115
                           120
Pro Leu His Tyr Thr Thr Ile Met Ser Pro Arg Ser Cys Ile Leu Leu
                                           140
                       135
Ile Ala Gly Ser Trp Val Ile Gly Asn Thr Ser Ala Leu Pro His Thr
                   150
                                       155
Leu Leu Thr Ala Ser Leu Ser Phe Cys Gly Asn Gln Glu Val Ala Asn
                                   170
              165
Phe Tyr Cys Asp Ile Met Pro Leu Leu Lys Leu Ser Cys Ser Asp Val
           180
                               185
His Phe Asn Val Lys Met Met Tyr Leu Gly Val Gly Val Phe Ser Leu
                           200
                                                205
Pro Leu Cys Ile Ile Val Ser Tyr Val Gln Val Phe Ser Thr Val
                       215
                                           220
Phe Gln Val Pro Ser Thr Lys Ser Leu Phe Lys Ala Phe Cys Thr Cys
                   230
                                       235
Gly Ser His Leu Thr Val Val Phe Leu Tyr Tyr Gly Thr Thr Met Gly
                                   250
              245
Met Tyr Phe Arg Pro Leu Thr Ser Tyr Ser Pro Lys Asp Ala Val Ile
                               265
                                                    270
           260
Thr Val Met Tyr Val Ala Val Thr Pro Ala Leu Asn Pro Phe Ile Tyr
                           280
Ser Leu Arg Asn Trp Asp Met Lys Ala Ala Leu Gln Lys Leu Phe Ser
                       295
Lys Arg Ile Ser Ser
305
<210> 1977
<211> 329
<212> PRT
<213> Unknown (H38g895 protein)
<223> Synthetic construct
<221> VARIANT
<222> (1)...(329)
<223> Xaa = Any Amino Acid
<400> 1977
Ala Leu Leu Phe His Ser Tyr Lys His Pro Thr Gln Arg Arg Met Thr
                                   10
Val Lys Ser His Ser Ile Val Thr Glu Phe Ser Leu Arg Gly Leu Thr
Lys Gln Pro Asp Leu Gln Leu Phe His Phe Leu Ile Phe Leu Asp Ile
                           40
His Met Val Thr Met Val Gly Asn Leu Gly Met Ile Thr Leu Ile Cys
                       55
Leu Asn Ser Gln Leu His Thr Pro Met Tyr Tyr Phe Phe Ser Asn Leu
                   70
                                       75
Ser Leu Leu Asp Leu Cys Tyr Ser Ser Ile Thr Asn Pro Lys Met Leu
               85
                                   90
Val Asn Phe Val Leu Lys Lys Ser Ile Ile Ser Tyr Ala Gly Tyr Met
           100
                               105
Ser Xaa Phe Tyr Phe Phe Leu Val Phe Val Ile Ala Arg Cys Tyr Met
                           120
```

```
Leu Met Val Lys Ala Cys Asp His Tyr Val Ala Ile Cys Cys Pro Leu
                       135
Leu Cys Asn Val Ile Met Ser His Val Thr Cys Ser Leu Met Val Ala
                   150
                                       155
Val Val Tyr Thr Met Gly Leu Val Val Ser Thr Ile Glu Thr Gly Leu
                                   170
Ile Leu Lys Leu Pro Tyr Cys Glu Leu Leu Thr Ser Arg Cys Phe Cys
                              185
                                                   190
           180
Asp Ile Leu Pro Leu Met Lys Leu Ser Xaa Ser Ser Ala Tyr Asp Val
                           200
Glu Met Ala Val Phe Phe Phe Ala Arg Phe Asn Leu Arg Ile Met Ile
                                           220
                       215
Leu Thr Val Leu Val Ser Tyr Thr Phe Ile Leu Phe Ser Ile Leu His
                   230
                                       235
Ile Ser Thr Thr Glu Gly Arg Ser Lys Val Phe Ser Thr Cys Ser Phe
                                   250
              245
His Leu Ala Ala Ile Gly Met Phe His Gly Xaa Thr Ala Phe Arg Tyr
           260
                               265
Leu Lys Pro Ala Ile Thr Ser Ser Leu Ala Gln Glu Asn Val Ala Ser
                  . 280
                                              285
Val Phe Tyr Thr Thr Val Ile Tyr Val Pro Asn Pro Leu Met Tyr Ser
                                           300
                      295
Leu Lys Asn Lys Asp Val Lys Ala Ala Met Gln Lys Thr Leu Arg Ser
                   310
Lys Phe Cys Cys Arg Cys Asn Tyr Leu
               325
<210> 1978
<211> 316
<212> PRT
<213> Unknown (H38g896 protein)
<220>
<223> Synthetic construct
<221> VARIANT
<222> (1)...(316)
<223> Xaa = Any Amino Acid
<400> 1978
Leu Leu Glu Gly Gly Asn Gln Thr Ser Thr Phe Glu Phe Leu Leu Trp
                                   10
Gly Leu Ser Asp Gln Pro Gln Gln Gln His Ile Phe Phe Leu Leu Phe
          20
                               25
                           40
```

Leu Trp Met Tyr Val Val Thr Val Ala Gly Asn Leu Leu Ile Val Leu Ala Ile Gly Thr Asp Thr His Leu His Thr Pro Met Tyr Phe Phe Leu 60 55 Ala Ser Leu Ser Cys Ala Asp Ile Phe Ser Thr Ser Thr Thr Val Pro 70 75 Lys Ala Leu Val Asn Ile Gln Thr Gln Ser Arg Ser Ile Ser Tyr Ala 90 Gly Cys Leu Ala Gln Leu Tyr Phe Phe Leu Thr Phe Gly Asp Met Asp 105 Ile Phe Leu Pro Ala Thr Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys 125 120 His Leu Leu His Tyr Met Met Ile Met Ser Leu His Arg Cys Ala Phe 135 140 Leu Val Thr Ala Cys Trp Thr Leu Thr Ser Leu Leu Ala Met Thr Arg 150 155 Thr Phe Leu Ile Phe Arg Leu Ser Leu Cys Ser Xaa Ile Leu Pro Gly

```
165
                                   170
Phe Phe Cys Asp Leu Gly Pro Leu Met Lys Val Ser Cys Ser Asp Ala
           180
                               185
Gln Val Asn Glu Leu Val Leu Leu Phe Leu Gly Gly Ala Val Ile Leu
                           200
                                               205
Ile Pro Phe Met Leu Ile Leu Val Ser Tyr Ile Arg Ile Val Ser Ala
                       215
                                           220
Ile Leu Arg Ala Pro Ser Ala Gln Gly Arg Arg Lys Ala Phe Ser Thr
                   230
                                       235
Cys Asp Ser His Leu Val Val Val Ala Leu Phe Phe Gly Thr Val Ile
               245
                                   250
Arg Ala Tyr Leu Cys Pro Ser Ser Ser Ser Ser Asn Ser Val Lys Glu
            260
                               265
                                                   270
Asp Thr Ala Ala Ala Val Met Tyr Thr Val Val Thr Pro Leu Leu Asn
        275
                           280
                                            285
Pro Phe Ile Tyr Ser Met Arg Asn Lys Asp Met Lys Ala Ala Val Val
                    295
Arg Leu Leu Lys Gly Arg Val Ser Phe Ser Gln Gly
                   310
<210> 1979
<211> 336
<212> PRT
<213> Unknown (H38g897 protein)
<220>
<223> Synthetic construct
<221> VARIANT
<222> (1)...(336)
<223> Xaa = Any Amino Acid
<400> 1979
Asp Thr Asp Pro Gln Ser Leu Thr Asp Val Ser Ile Phe Leu Leu Leu
                                   10
Lys Leu Ser Glu Asp Pro Glu Leu Gln Gln Val Val Ala Gly Leu Phe
                               25
Leu Ser Met Cys Leu Val Thr Val Leu Gly Asn Leu Leu Ile Ile Leu
                           40
                                               45
Ala Val Ser Pro Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu
                       55
                                           60
Ser Asn Leu Ser Leu Ala Asp Ile Gly Phe Thr Ser Thr Thr Val Pro
                   70
                                       75
Lys Met Ile Val Asp Ile Gln Ser His Ser Arg Val Ile Ser Tyr Ala
                                   90
Gly Cys Leu Thr Gln Met Ser Leu Phe Ala Ile Phe Gly Gly Met Glu
           100
                               105
Glu Asn Met Leu Leu Ser Val Met Ala Tyr Asp Arg Phe Val Ala Ile
      115
                           120
                                               125
Cys His Pro Leu Tyr Cys Ser Ala Ile Phe Asn Pro Cys Phe Cys Gly
                      135
                                           140
Phe Leu Asp Leu Leu Ser Phe Ile Phe Phe Leu Ser Leu Ser Asp
                   150
                                       155
Ser Gln Leu His Asn Leu Ile Ala Leu Gln Met Thr Cys Phe Lys Asp
                                  170
Val Glu Ile Pro Asn Phe Phe Trp Glu Pro Ser Gln Leu Ser His Leu
                              185
Ala Cys Cys Asp Thr Phe Thr Arg Asn Ile Met Tyr Phe Pro Ala Ala
                                              205
                       200
Ile Phe Gly Phe Leu Pro Ile Leu Gly Thr Leu Phe Ser Tyr Cys Lys
                       215
```

```
Ile Val Ser Ser Ile Leu Arg Val Ser Ser Ser Gly Gly Lys Tyr Lys
                   230
                                      235
Ala Phe Ser Thr Cys Gly Ser His Leu Ser Val Val Cys Xaa Phe Tyr
                                   250
               245
Gly Thr Gly Ile Gly Gly Tyr Leu Gly Ser Asp Val Ser Ser Ser Pro
           260
                               265
Arg Lys Gly Ala Val Ala Ser Val Met Tyr Met Val Val Thr Pro Met
                           280
                                              285
Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Ser Val
                                           300
                       295
Leu Arg Arg Pro His Gly Ser Thr Val Xaa Ser Gln His Leu Leu Ile
                                       315
                310
Cys Ser Ile Pro Phe Val Gly Trp Phe Lys Lys Gly Ala Lys Val Lys
<210> 1980
<211> 309
<212> PRT
<213> Unknown (H38g898 protein)
<220>
<223> Synthetic construct
<221> VARIANT
<222> (1)...(309)
<223> Xaa = Any Amino Acid
<400> 1980
Met Arg Gln Asn Asn Asn Ile Thr Glu Phe Val Leu Leu Gly Phe Ser
                5
                                   10
Gln Asp Leu Asp Val Gln Lys Ala Leu Phe Val Ile Phe Leu Leu Thr
         20
                               25
Tyr Leu Val Thr Val Val Gly Asn Leu Leu Ile Val Val Thr Ile Ile
                           40
Thr Ser Pro Ser Leu Gly Ser Pro Met Tyr Phe Phe Leu Ala Cys Leu
                       55
                                           60
Ser Phe Ile Asp Ala Ala Tyr Ser Thr Thr Ile Ser Pro Lys Leu Ile
                                       75
                   70
Val Asp Leu Leu Cys Asp Lys Lys Thr Ile Ser Phe Pro Ala Cys Met
               85
                                   90
                                                      95
Gly Gln Leu Phe Ile Tyr His Leu Phe Gly Gly Ser Glu Val Phe Leu
                                                   110
                              105
Leu Val Val Met Ala Cys Asp His Tyr Val Ala Ile Cys Lys Pro Leu
                          120
                                               125
115
His Tyr Leu Thr Ile Met Asn Arg Gln Val Xaa Ile Leu Leu Val
                                           140
                       135
   130
Val Val Val Thr Gly Gly Phe Leu His Ser Val Phe Gln Ile Val Val
                   150
                                       155
Val Tyr Ser Leu Ala Phe Cys Gly Pro Asn Val Ile Asp Tyr Phe Val
                                   170
               165
Cys Asp Met Tyr Pro Leu Leu Glu Leu Val Cys Thr Asp Thr Tyr Phe
                               185
Ile Gly Leu Thr Val Phe Val Asn Gly Gly Thr Ile Cys Ile Val Val
                           200
                                               205
Phe Thr Leu Leu Leu Ile Ser Tyr Gly Val Ile Leu Asn Ser Leu Lys
                       215
                                           220
Thr Tyr Ser Gln Glu Gly Arg His Lys Val Leu Phe Thr Cys Ser Ser
                  230
                                       235
His Ile Ile Val Phe Ala Leu Phe Phe Val Pro Cys Ile Phe Met Tyr
              245
                                   250
Val Arg Pro Val Ser Asn Tyr Pro Phe Asp Lys Phe Leu Thr Val Phe
```

```
265
            260
Tyr Thr Val Ile Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg
                    280
                                              285
Asn Ser Glu Met Arg Asn Ser Val Glu Thr Leu Leu Cys Lys Ser Xaa
                       295
Leu Tyr Xaa Ser Lys
<210> 1981
<211> 313
<212> PRT
<213> Unknown (H38g899 protein)
<220>
<223> Synthetic construct
<400> 1981
Met Glu Arg Ile Asn Ser Thr Leu Leu Thr Ala Phe Ile Leu Thr Gly
                5
                                   10
Ile Pro Tyr Pro Leu Arg Leu Arg Thr Leu Phe Phe Val Phe Phe
        20
                               25
Leu Ile Tyr Ile Leu Thr Gln Leu Gly Asn Leu Leu Ile Leu Ile Thr
       35
                           40
Val Trp Ala Asp Pro Arg Leu His Ala Arg Pro Met Tyr Ile Phe Leu
                       55
                                           60
Gly Val Leu Ser Val Ile Asp Met Ser Ile Ser Ser Ile Ile Val Pro
                   70
Arg Leu Met Met Asn Phe Thr Leu Gly Val Lys Pro Ile Pro Phe Gly
               85
                                   90
Gly Cys Val Ala Gln Leu Tyr Phe Tyr His Phe Leu Gly Ser Thr Gln
                               105
           100
Cys Phe Leu Tyr Thr Leu Met Ala Tyr Asp Arg Tyr Leu Ala Ile Cys
                           120
                                               125
Gln Pro Leu Arg Tyr Pro Val Leu Met Thr Ala Lys Leu Ser Ala Leu
                       135
                                           140
Leu Val Ala Gly Ala Trp Met Ala Gly Ser Ile His Gly Ala Leu Gln
                   150
                                       155
Ala Ile Leu Thr Phe Arg Leu Pro Tyr Cys Gly Pro Asn Gln Val Asp
                                   170
Tyr Phe Phe Cys Asp Ile Pro Ala Val Leu Arg Leu Ala Cys Ala Asp
                               185
           180
                                                   190
Thr Thr Val Asn Glu Leu Val Thr Phe Val Asp Ile Gly Val Val Val
                           200
                                               205
Ala Ser Cys Phe Ser Leu Ile Leu Leu Ser Tyr Ile Gln Ile Ile Gln
                       215
                                           220
Ala Ile Leu Arg Ile His Thr Ala Asp Gly Arg Arg Arg Ala Phe Ser
                   230
                                       235
Thr Cys Gly Ala His Val Thr Val Val Thr Val Tyr Tyr Val Pro Cys
                                   250
               245
Ala Phe Ile Tyr Leu Arg Pro Glu Thr Asn Ser Pro Leu Asp Gly Ala
                               265
                                                   270
Ala Ala Leu Val Pro Thr Ala Ile Thr Pro Phe Leu Asn Pro Leu Ile
                           280
                                              285
Tyr Thr Leu Arg Asn Gln Glu Val Lys Leu Ala Leu Lys Arg Met Leu
   290
                       295
                                          300
Arg Ser Pro Arg Thr Pro Ser Glu Val
                   310
<210> 1982
<211> 318
<212> PRT
```

1152

```
<213> Unknown (H38g900 protein)
<220>
<223> Synthetic construct
<221> VARIANT
<222> (1)...(318)
<223> Xaa = Any Amino Acid
<400> 1982
Met Gly Lys Thr Lys Asn Thr Ser Leu Asp Thr Val Val Arg Asp Phe
                                    10
Ile Leu Leu Gly Leu Ser His Pro Pro Asn Ile Arg Ser Leu Leu Phe
                                25
Leu Val Phe Phe Val Ile Tyr Ile Leu Thr Gln Leu Gly Asn Leu Leu
                           40
Ile Leu Leu Thr Val Trp Ala Asp Pro Lys Leu Arg Ala Arg Pro Met
                       55
Tyr Ile Leu Leu Gly Val Leu Ser Phe Leu Asp Met Trp Leu Ser Ser
                                       75
                    70
Val Ile Val Pro Xaa Ile Ile Leu Asn Phe Thr Pro Ala Asn Lys Ala
                                    90
               85
Ile Pro Phe Gly Gly Cys Val Ala Gln Leu Tyr Phe Phe His Phe Leu
            100
                                105
Gly Ser Thr Gln Cys Phe Leu Tyr Thr Leu Met Ala Tyr Asp Arg Tyr
                                                125
                            120
Leu Ala Ile Cys Gln Pro Leu Arg Tyr Pro Val Leu Met Asn Gly Arg
                        135
Leu Cys Thr Val Leu Val Ala Gly Ala Trp Val Ala Gly Ser Met His
                                        155
                    150
Gly Ser Ile Gln Ala Thr Leu Thr Phe Arg Leu Pro Tyr Cys Gly Pro
                                                        175
                                   170
               165
Asn Gln Val Asp Tyr Phe Ile Cys Asp Ile Pro Ala Val Leu Arg Leu
                                                    190
           180
                                185
Ala Cys Ala Asp Thr Thr Val Asn Glu Leu Val Thr Phe Val Asp Ile
                                                205
        195
                           200
Gly Val Val Ala Ala Ser Cys Phe Met Leu Ile Leu Leu Ser Tyr Ala
                       215
                                            220
Asn Ile Val Asn Ala Ile Leu Lys Ile Arg Thr Thr Asp Gly Arg Arg
                   230
                                        235
Arg Ala Phe Ser Thr Cys Gly Ser His Leu Ile Val Val Thr Val Tyr
               245
                                    250
                                                        255
Tyr Val Pro Cys Ile Phe Ile Tyr Leu Arg Ala Gly Ser Lys Gly Pro
                                                    270
                                265
            260
Leu Asp Gly Ala Ala Ala Val Phe Tyr Thr Val Val Thr Pro Leu Leu
        275
                            280
                                                285
Asn Pro Leu Ile Tyr Thr Leu Arg Asn Gln Glu Val Lys Ser Ala Leu
                                            300
                       295
Lys Arg Ile Thr Ala Gly Gln Gly Thr Glu Xaa Lys Xaa Val
<210> 1983
<211> 310
<212> PRT
<213> Unknown (H38g901 protein)
<220>
<223> Synthetic construct
<400> 1983
```

Met Gly Lys Thr Lys Asn Thr Ser Leu Asp Ala Val Val Thr Asp Phe

```
10
Ile Leu Leu Gly Leu Ser His Pro Pro Asn Leu Arg Ser Leu Leu Phe
                               25
           20
Leu Val Phe Phe Ile Ile Tyr Ile Leu Thr Gln Leu Gly Asn Leu Leu
                           40
Ile Leu Leu Thr Met Trp Ala Asp Pro Lys Leu Cys Ala Arg Pro Met
                       55
Tyr Ile Leu Leu Gly Val Leu Ser Phe Leu Asp Met Trp Leu Ser Ser
                    70
                                       75
Val Thr Val Pro Arg Leu Ile Leu Asp Phe Thr Pro Ser Ile Lys Ala
                                   90
Ile Pro Phe Gly Gly Cys Val Ala Gln Leu Tyr Phe Phe His Phe Leu
           100
                               105
Gly Ser Thr Gln Cys Phe Leu Tyr Thr Leu Met Ala Tyr Asp Arg Tyr
                          120
                                              125
        115
Leu Ala Ile Cys Gln Pro Leu His Tyr Pro Val Leu Met Asn Gly Arg
                       135
                                           140
Leu Cys Thr Val Leu Val Ala Gly Ala Trp Val Ala Gly Ser Met His
                                      155
                   150
Gly Ser Ile Gln Ala Thr Leu Thr Phe Arg Leu Pro Tyr Cys Gly Pro
                                  170
Asn Gln Val Asp Tyr Phe Ile Cys Asp Ile Arg Ala Val Leu Arg Leu
                               185
                                                  190
           180
Ala Cys Ala Asp Thr Thr Val Asn Glu Leu Val Thr Phe Val Asp Val
                           200
                                               205
Arg Val Val Ala Ala Ser Cys Phe Met Leu Ile Leu Leu Ser Tyr Ala
                       215
                                           220
Asn Ile Val His Ala Ile Leu Lys Ile Arg Thr Ala Asp Gly Arg Arg
                   230
                                       235
Arg Ala Phe Ser Thr Cys Gly Ser His Leu Ile Val Val Thr Val Tyr
                                   250
               245
Tyr Val Pro Cys Ile Phe Ile Tyr Leu Arg Ala Gly Ser Lys Asp Pro
           260
                               265
                                                   270
Leu Asp Gly Ala Ala Ala Val Phe Tyr Thr Val Val Thr Pro Leu Leu
                           280
Asn Pro Leu Ile Tyr Thr Leu Arg Asn Gln Glu Val Lys Ser Ala Leu
                      295
Lys Arg Ile Thr Ala Gly
<210> 1984
<211> 300
<212> PRT
<213> Unknown (H38g902 protein)
<220>
<223> Synthetic construct
<400> 1984
Met Phe Ile Leu Thr Gly Phe Thr Asp Asp Phe Glu Leu Gln Val Phe
                                  10
Leu Phe Leu Leu Phe Phe Ala Ile Tyr Leu Phe Thr Leu Ile Gly Asn
                               25
Leu Gly Leu Val Val Leu Val Ile Glu Asp Ser Trp Leu His Asn Pro
                           40
Met Tyr Tyr Phe Leu Ser Val Leu Ser Phe Leu Asp Ala Cys Tyr Ser
                55
                                          60
Thr Val Val Thr Pro Lys Met Leu Val Asn Phe Leu Ala Lys Asn Lys
                  70
                                   . 75
Ser Ile Ser Phe Ile Gly Cys Ala Thr Gln Met Leu Leu Phe Val Thr
```

```
Phe Gly Thr Thr Glu Cys Phe Leu Leu Ala Ala Met Ala Tyr Asp His
                                105
Tyr Val Ala Ile Tyr Asn Pro Leu Leu Tyr Ser Val Ser Met Ser Pro
                           120
                                                125
Arg Val Tyr Val Pro Leu Ile Thr Ala Ser Tyr Val Ala Gly Ile Leu
                       135
                                            140
His Ala Thr Ile His Ile Val Ala Thr Phe Ser Leu Ser Phe Cys Gly
                                        155
                    150
Ser Asn Glu Ile Arg His Val Phe Cys Asp Met Pro Pro Leu Leu Ala
                165
                                    170
Ile Ser Cys Ser Asp Thr His Thr Asn Gln Leu Leu Phe Tyr Phe
            180
                                185
Val Gly Ser Ile Glu Ile Val Thr Ile Leu Ile Val Leu Ile Ser Cys
        195
                            200
Asp Phe Ile Leu Leu Ser Ile Leu Lys Met His Ser Ala Lys Gly Arg
                       215
                                            220
Gln Lys Ala Phe Ser Thr Cys Gly Ser His Leu Thr Gly Val Thr Ile
                    230
                                        235
Tyr His Gly Thr Ile Leu Val Ser Tyr Met Arg Pro Ser Ser Ser Tyr
                                   250
                245
Ala Ser Asp His Asp Ile Ile Val Ser Ile Phe Tyr Thr Ile Val Ile
                                265
                                                    270
Pro Lys Leu Asn Pro Ile Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys
        275
                            280
                                                285
Lys Ala Val Lys Lys Met Leu Lys Leu Val Tyr Lys
                        295
<210> 1985
<211> 324
<212> PRT
<213> Unknown (H38g903 protein)
<220>
<223> Synthetic construct
<221> VARIANT
<222> (1)...(324)
<223> Xaa = Any Amino Acid
<400> 1985
His Thr Glu Pro Arg Asn Leu Thr Gly Val Xaa Glu Phe Leu Leu
                                    10
Gly Leu Ser Glu Asp Pro Glu Leu Gln Pro Val Leu Ala Leu Leu Ser
                                25
Leu Ser Leu Ser Met Tyr Leu Val Thr Val Leu Arg Asn Leu Leu Ser
                            40
Ile Leu Ala Val Arg Ser Glu Ser Pro Leu His Thr Thr Met Tyr Phe
                        55
Phe Leu Ser Ile Leu Cys Trp Ala Asp Ile Gly Phe Thr Ser Ala Thr
                    70
                                        75
Val Pro Lys Met Ile Val Asp Met Gln Trp Tyr Ser Lys Val Ile Ser
                                    90
                85
His Ala Gly Cys Leu Thr Gln Met Ser Phe Leu Val Leu Phe Ala Cys
                                105
            100
Ile Glu Gly Met Leu Leu Thr Val Met Ala Tyr Asp Cys Phe Val Gly
                            120
                                               125
Ile Cys Arg Pro Leu His Tyr Pro Val Ile Val Asn Pro His Leu Cys
                                           140
   130
                       135
Val Phe Phe Val Leu Val Ser Phe Phe Leu Ser Leu Leu Asp Ser Gln
                   150
                                        155
```

Leu His Ser Trp Ile Val Leu Gln Phe Thr Ile Ile Lys Asn Val Glu

PCT/US00/27582 WO 01/27158

```
165
                                   170
Ile Ser Asn Phe Val Cys Asp Pro Ser Gln Leu Leu Lys Leu Ala Cys
                              185
Ser Asp Ser Val Ile Asn Ser Ile Phe Ile Tyr Phe Gly Ser Thr Met
       195
                          200
Phe Gly Phe Leu Pro Ile Ser Gly Ile Leu Leu Ser Tyr Tyr Lys Ile
                       215
                                          220
Val Pro Ser Ile Leu Arg Ile Ser Ser Ser Asp Gly Lys Tyr Lys Ala
                  230
                                      235
Phe Ser Thr Tyr Gly Ser His Leu Ala Val Phe Cys Xaa Phe Asp Gly
               245
                                  250
Thr Gly Ile Gly Val Tyr Leu Thr Ser Ala Val Ala Pro Pro Pro Arg
           260
                              265
                                         270
Asn Gly Val Val Val Ser Val Lys Xaa Ala Val Val Thr Pro Met Pro
       275
                          280
                                              285
Asn Leu Phe Ile Tyr Ser Leu Arg Asn Arg Asp Ile Gln Ser Ala Leu
                       295
                                          300
Arg Arg Leu Pro Asn Lys Thr Val Glu Ser Pro Xaa Ser Val Pro Ser
                   310
Phe Phe Trp Cys
<210> 1986
<211> 335
<212> PRT
```

<213> Unknown (H38g904 protein)

<223> Synthetic construct

<221> VARIANT

<222> (1)...(335)

<223> Xaa = Any Amino Acid

<400> 1986

Asp Thr Asp Pro Gln Ser Ile Thr Asp Val Ser Ile Phe Leu Leu Leu 10 Glu Leu Ser Glu Asp Pro Glu Leu Gln Pro Val Val Ala Gly Leu Phe 20 25 Leu Ser Met Cys Leu Val Met Val Leu Gly Asn Leu Leu Ile Ile Leu 40 Asp Val Ser Pro Asp Ser His Leu Pro Thr Pro Met Tyr Phe Phe Leu 55 Ser Asn Leu Ser Leu Pro Asp Ile Gly Phe Thr Ser Thr Thr Val Pro 70 75 Lys Met Ile Val Asp Ile Gln Ser His Ser Lys Val Ile Tyr Ala Gly 85 90 Cys Leu Thr Val Met Ser Leu Phe Ala Ile Phe Gly Gly Met Glu Lys 100 105 Asn Met Leu Leu Ser Val Met Ala Tyr Asp Arg Phe Val Pro Ile Cys 120 125 His Pro Leu Tyr Arg Ser Ala Ile Leu Asn Pro Cys Phe Cys Gly Phe 135 140 Leu Asn Leu Leu Ser Phe Phe Phe Leu Ser Leu Leu Asp Ser Gln 150 155 Leu His Asn Leu Ile Ala Leu Gln Met Thr Cys Phe Lys Asp Val Glu 170 Ile Pro Asn Phe Phe Trp Glu Pro Ser Gln Leu Pro His Leu Ala Cys 185 190 Cys Asp Thr Phe Thr Arg Asn Ile Ser Met Tyr Phe Pro Ala Ala Val 200

PCT/US00/27582 WO 01/27158

```
Phe Gly Phe Leu Ser Ile Ser Gly Thr Leu Phe Ser Tyr Cys Lys Met
                                           220
                      215
Val Ser Ser Ile Leu Arg Val Ser Ser Ser Gly Gly Lys Tyr Lys Ala
                   230
                                       235
225
Phe Ser Thr Xaa Gly Ser His Leu Ser Val Val Cys Xaa Phe Tyr Gly
                                   250
               245
Thr Gly Val Gly Glu Tyr Leu Gly Ser Asp Val Ser Ser Ser Pro Arg
                               265
                                                   270
Lys Gly Ala Val Ala Ser Val Met Tyr Thr Val Val Thr Pro Met Leu
                                               285
                          280
Asn Pro Phe Ile Tyr Ser Leu Arg Asn Gly Asp Ile Lys Ser Val Leu
                       295
Arg Arg Pro Gln Gly Ser Thr Val Ser Ser Gln Tyr Leu Leu Ile Cys
                   310
                                       315
Ser Ile Pro Phe Val Gly Trp Val Asn Lys Asp Ser Lys Val Lys
               325
                                  330
<210> 1987
<211> 310
<212> PRT
<213> Unknown (H38g905 protein)
<223> Synthetic construct
<221> VARIANT
<222> (1)...(310)
<223> Xaa = Any Amino Acid
<400> 1987
Met Glu Asn Arg Lys Asn Val Thr Xaa Phe Ile Leu Leu Gly Leu Thr
                                   10
Gln Asn Pro Glu Gly Gln Lys Val Leu Phe Val Thr Phe Leu Leu Ile
                                                   30
                               25
Tyr Ile Val Thr Ile Met Gly Asn Leu Leu Ile Met Val Thr Ile Met
                           40
                                               45
Ala Ser Gln Ser Leu Gly Ser Pro Met Tyr Phe Phe Leu Ala Ser Leu
                       55
Ser Phe Ile His Thr Val Tyr Tyr Thr Ala Ile Ala Pro Lys Met Ile
                                       75
                   70
Val Asp Leu Leu Ser Glu Lys Lys Thr Ile Ser Phe Gln Gly Cys Met
                                   90
               85
Ala Gln Leu Phe Met Asp His Leu Phe Ala Gly Ala Glu Val Ile Leu
                                                  110
           100
                               105
Leu Val Val Met Ala Tyr Asp Gln Tyr Val Ala Ile Cys Lys Pro Leu
                                               125
                          120
His Tyr Leu Ile Ile Met Asn Arg Arg Val Cys Val Leu Met Leu Leu
                       135
                                           140
```

Phe Phe Pro Leu Leu Ser Tyr Gly Val Ile Leu Pro Ser Leu Lys 215 220 Thr Gln Ser Leu Glu Gly Lys Cys Lys Ala Phe Tyr Thr Cys Ala Ser

Val Ala Trp Ile Gly Gly Phe Leu His Ser Leu Val Gln Phe Leu Phe

Ile Tyr Gln Leu Pro Phe Cys Gly Pro Asn Val Ile Asp Asn Phe Leu

Cys Asp Leu Tyr Pro Leu Leu Lys Leu Ala Cys Thr Asn Thr Tyr Val

Thr Gly Leu Ser Met Ile Ala Asn Gly Gly Ala Ile Cys Thr Val Thr 200

185

150

180

235 230 His Ile Thr Val Ile Thr Leu Phe Phe Val Pro Cys Ile Phe Leu Leu

155

190

205

170

```
245
                                    250
Ala Arg Pro Asn Ser Thr Phe Pro Ile Asp Lys Ser Met Thr Val Val
            260
                                265
                                                    270
Leu Thr Cys Ile Thr Pro Met Leu Lys Pro Leu Ile Tyr Ala Leu Arg
       275
                            280
                                               285
Asn Ala Glu Met Lys Ser Ala Met Arg Lys Leu Trp Ser Glu Lys Val
                                            300
                        295
Ser Leu Ala Gly Lys Gly
<210> 1988
<211> 308
<212> PRT
<213> Unknown (H38g906 protein)
<220>
<223> Synthetic construct
<400> 1988
His Met Pro Pro Asn Asn Val Thr Glu Phe Ile Leu Leu Gly Leu Thr
Gln Asn Pro His Leu Gln Lys Ile Leu Phe Ile Val Phe Leu Phe Ile
                                25
Phe Leu Phe Thr Met Leu Ala Asn Leu Phe Ile Val Ile Thr Ile Ser
                            40
Cys Ser Pro Thr Leu Ser Ser Pro Met Tyr Phe Phe Leu Thr Tyr Leu
                        55
                                            60
Ser Phe Ile Asp Ala Ser Tyr Thr Ser Val Thr Thr Pro Lys Met Ile
                    70
                                        75
Thr Asp Leu Leu Tyr Gln Arg Arg Thr Ile Ser Leu Ala Gly Cys Leu
Thr Gln Leu Phe Val Glu His Leu Leu Gly Gly Ser Glu Ile Ile Leu
                                105
Leu Ile Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                            120
                                                125
His Tyr Thr Thr Ile Met Gln Gln Gly Ile Cys His Leu Leu Val Val
                        135
                                            140
Ile Ala Trp Ile Gly Gly Ile Leu His Ala Thr Val Gln Ile Leu Phe
                    150
                                        155
Met Thr Asp Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Phe Met
                                    170
Cys Asp Leu Phe Pro Leu Leu Lys Leu Ala Cys Arg Asp Thr Tyr Arg
                                185
Leu Gly Met Leu Val Ala Ala Asn Ser Gly Ala Met Cys Leu Leu Ile
                            200
                                                205
Phe Ser-Leu Leu Val Ile Ser Tyr Ile Val Ile Leu Ser Ser Leu Lys
                        215
                                           220
Ser Tyr Ser Ser Glu Gly Gln His Lys Ala Leu Ser Thr Cys Gly Ser
                   230
                                       235
His Phe Thr Val Val Leu Phe Phe Val Pro Cys Ile Phe Thr Tyr
                                   250
                245
Met His Pro Val Val Thr Tyr Ser Val Asp Lys Leu Val Thr Val Phe
                               265
                                                    270
Phe Ala Ile Leu Thr Pro Met Leu Asn Pro Ile Ile Tyr Thr Val Arg
                            280
                                                285
Asn Thr Glu Val Lys Asn Ala Val Arg Ser Leu Leu Arg Lys Arg Val
                       295
Thr Val Tyr Ala
305
```

<210> 1989

```
<211> 166
<212> PRT
<213> Unknown (H38g907 protein)
<223> Synthetic construct
<221> VARIANT
<222> (1)...(166)
<223> Xaa = Any Amino Acid
<400> 1989
Met Tyr Thr Leu Leu Met Ala Arg Leu Cys Leu Cys Ala Asp Asn
                                   10
Val Ile Pro His Ser Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ala
                               25
           20
Leu Ser Asp Thr Arg Val Asn Glu Xaa Val Ile Phe Ile Met Gly Gly
                           40
Leu Ile Leu Val Ile Pro Ser Ile Leu Ile Leu Gly Ser Tyr Ala Arg
                      55
Ile Val Ser Ser Ile Leu Lys Val Pro Ser Ser Lys Cys Ile Cys Lys
                                        75
                    70
Ala Phe Ser Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr
                                    90
                85
Gly Thr Val Ile Gly Leu Tyr Leu Cys Ser Ser Ala Asn Ser Ser Thr
                                105
            100
Leu Lys Asp Thr Val Met Ala Met Met Tyr Thr Val Val Thr Pro Met
                           120
Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Gly Ala
                       135
                                           140
Leu Ser Arg Val Ile His Gln Lys Lys Thr Phe Phe Ser Leu Xaa Xaa
                                        155
                   150
Xaa His Leu Glu Leu Leu
                165
<210> 1990
<211> 333
<212> PRT
<213> Unknown (H38g908 protein)
<220>
<223> Synthetic construct
<221> VARIANT
<222> (1)...(333)
<223> Xaa = Any Amino Acid
<400> 1990
Met Gly Pro Lys Asn Leu Thr Arg Val Leu Glu Phe Phe Leu Leu His
                                 . 10
Phe Leu Asp Asp Leu Glu Leu Gln Pro Phe Leu Ser Gly Cys Pro Xaa
                               25
Thr Met His Leu Val Thr Val Leu Ala Asn Leu Leu Thr Ser Phe Xaa
                                                45
                           40
Leu Ser Ala Leu Pro His Leu His Asn Pro Met Asn Phe Asn Leu Ser
                        55
Leu Ala Asp Ile Gly Phe Thr Pro Ala Thr Ile Ser Lys Ile Thr Val
                    70
                                        75
Asp Leu Gln Thr His Ser Arg Ile Ile Leu Tyr Met Ser Cys Leu Lys
                                   90
Xaa Met Ser Phe Lys Ile Ile Phe Gly Cys Leu His Asn Leu Leu Met
```

```
100
                               105
Thr Val Met Ala Tyr Asp Pro Phe Val Ala Thr Cys His Leu Leu Tyr
                       120
                                               125
Tyr Thr Val Ile Arg Asn Pro His Leu Cys Gly Leu Leu Leu Val
                       135
                                           140
Ser Leu Phe Ser Leu Ser Phe Phe Phe Leu Ile Ser Leu Leu Glu Thr
                  150
                                       155
Gln Leu Tyr Ser Leu Met Val Ser Gln Val Leu Cys Met Gln Asp Val
               165
                                  170
Asp Ile Pro His Phe Phe Cys Asp Pro Ser Gln Phe Leu His Leu Ser
                              185
           180
Cys Ser Asp Thr Ala Thr Asn Asn Thr Leu Met His Phe Ile Gly Ala
                          200
Ile Phe Cys Gly Pro Phe Ser Gly Ile Leu Tyr Cys Tyr Thr Gln Ile
                       215
                                           220
Met Phe Ser Ile Leu Ile Thr Leu Xaa Asn Val Gly Ser Ile Lys Gln
                   230
                                       235
Thr Phe Ser Thr His Arg Ser His Leu Ser Val Val Cys Leu Phe Tyr
               245
                                   250
Gly Thr Gly Leu Gly Val Tyr Leu Ser Leu Ala Gly Ser Pro Ser Pro
                               265
Arg Thr Gly Val Val Ala Ser Met Val Tyr Thr Thr Val Thr Leu Met
        275
                           280
                                               285
Leu Asn Pro Val Ile His Ser Leu Arg Asn Arg Asp Ile Lys Asn Thr
                       295
                                           300
Trp Trp Trp Leu Leu Ser Ile Thr Ala Trp Tyr Gln Tyr Leu Cys Tyr
                   310
                                       315
Pro Leu Trp Ser Val Val Arg Lys Asn Ser Lys Leu Lys
                325
                                   330
<210> 1991
<211> 308
<212> PRT
<213> Unknown (H38g909 protein)
<220>
<223> Synthetic construct
<400> 1991
Met Gly Thr Ser Asn Asn Glu Thr Glu Phe Ile Leu Leu Gly Ile Thr
                                   10
Lys Asn Pro Glu Leu Arg Lys Ile Phe Ser Ala Leu Phe Leu Ala Met
           20
                               25
Tyr Val Thr Thr Val Leu Gly Asn Leu Phe Ile Val Val Thr Leu Ala
                           40
Ala Ser Trp Ser Leu Arg Ser Pro Met Tyr Phe Ser Leu Thr Ser Leu
                       55
Ser Leu Met Gly Ala Thr Tyr Ser Ser Ile Thr Ala Pro Lys Met Thr
Val Asp Ser Leu Arg Ser Thr Thr Ile Ser Leu Glu Gly Cys Met Thr
                                   90
Gln Leu Phe Ala Glu His Phe Ser Asp Gly Val Ala Ile Ile Leu Leu
           100
                              105
Thr Val Met Val Cys Asp Cys Tyr Glu Ala Ile Ser Lys Pro Leu His
                                              125
                          120
Asp Thr Thr Ile Met Ser Pro Arg Val Cys Cys Leu Leu Val Val Glu
                      135
                                           140
Ala Trp Val Gly Gly Leu Thr His Ala Thr Ile Gln Leu Phe Phe
                   150
                                       155
Leu Tyr Gln Ile Pro Phe Cys Gly Pro Asn Ile Ile Asp His Phe Ile
                                   170
```

```
Cys Asp Leu Phe Pro Leu Leu Lys Leu Ala Tyr Met Asp Thr His Met
                               185
           180
Leu Gly Leu Leu Val Ile Leu Asn Ser Gly Val Met Cys Met Ala Ile
                           200
                                               205
Phe Leu Ile Leu Ile Ala Ser Tyr Ile Val Thr Leu Tyr Ser Leu Lys
                                           220
                       215
Ser Cys Ser Ser Val Gly Arg Arg Asn Thr Leu Ser Thr Cys Gly Ser
                                       235
                   230
His His Thr Val Val Ile Leu Phe Phe Val Glu Cys Ile Phe Leu Tyr
                                   250
               245
Ile Arg Pro Val Val Thr Tyr Pro Ile Asp Lys Asp Met Ala Ile Ser
                               265
           260
Phe Thr Ile Val Ala Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg
                                            285
                       280
       275
Gly Ile Lys Val Lys Asn Ala Ile Arg Lys Met Trp Met Lys Gln Gly
                      295
   290
Thr Leu Gly Gly
305
<210> 1992
<211> 318
<212> PRT
<213> Unknown (H38g910 protein)
<223> Synthetic construct
<221> VARIANT
<222> (1)...(318)
<223> Xaa = Any Amino Acid
<400> 1992
Met Ala Pro Thr Asn Leu Thr Ser Ala Pro Val Phe Leu Leu Gly
                                   10
Leu Val Asp Gly Thr Asp Ala His Pro Leu Leu Phe Leu Leu Cys Leu
                               25
Gly Ile Tyr Leu Leu Asn Ala Leu Ser Asn Leu Ser Met Val Ala Leu
                           40
Val Arg Ser Asp Gly Ala Leu Arg Ser Pro Met Tyr Tyr Phe Leu Gly
                       55
                                           60
His Leu Ser Leu Val Asp Val Cys Phe Thr Thr Val Thr Val Pro Arg
                                       75
                   70
Leu Leu Ala Gly Leu Leu His Pro Gly Gln Ala Ile Ser Phe Gln Ala
                                   90
               85
Cys Leu Ala Glu Met Tyr Phe Phe Val Thr Leu Gly Ile Thr Glu Ser
                               105
                                                   110
Tyr Leu Met Ala Ala Met Ser Xaa Arg Ala Arg Arg Arg Val Pro Ala
                                               125
                           120
Pro Leu Tyr Gly Ala Leu Val Thr Pro Ser Ala Cys Ala Ser Leu Val
                       135
                                           140
Arg Ala Ser Trp Ala Val Thr His Leu His Ser Leu Leu His Thr Leu
                                       155
                   150
Leu Leu Ser Ala Leu Ser Tyr Pro Tyr Pro Thr Pro Val Arg Pro Phe
                                                       175
               165
                                  170
Phe Cys Asp Met Thr Val Met Leu Ser Leu Ala Thr Ser Asp Thr Ser
                               185
           180
Ala Ala Glu Thr Ala Ile Phe Ser Glu Gly Leu Ala Val Val Leu Ala
                                               205
                           200
       195
Pro Leu Leu Val Phe Leu Ser Tyr Ala Arg Ile Leu Val Ala Val
                       215
                                           220
Leu Gly Leu Pro Arg Pro Arg Ala Phe Ser Thr Cys Gly Ala His
```

```
230
                                       235
Leu Val Ala Val Ala Val Ala Leu Phe Phe Gly Ser Val Leu Ser Val
               245
                                   250
Tyr Phe Pro Pro Ser Ser Ala Tyr Ser Ala Arg Tyr Asp Arg Leu Ala
                                                  270
                               265
Ser Val Val Tyr Ala Val Ile Thr Pro Thr Leu Asn Pro Phe Ile Asn
                                       285
                           280
Ser Leu Arg Asn Lys Glu Val Lys Gly Ala Leu Lys Arg Gly Leu Arg
                                          300
                      295
Trp Arg Ala Ala Pro Gln Glu Ala Trp Arg Ala Asn Leu Ala
                  310
<210> 1993
<211> 311
<212> PRT
<213> Unknown (H38g911 protein)
<220>
<223> Synthetic construct
<400> 1993
Met Lys Gly Ala Asn Leu Ser Gln Gly Met Glu Phe Glu Leu Leu Gly
                                   10
Leu Thr Thr Asp Pro Gln Leu Gln Arg Leu Leu Phe Val Val Phe Leu
                                                   30
                               25
Gly Met Tyr Thr Ala Thr Leu Leu Gly Asn Leu Val Met Phe Leu Leu
                                               45
       35
                           40
Ile His Val Ser Ala Thr Leu His Thr Pro Met Tyr Ser Leu Leu Lys
                                           60
                       55
Ser Leu Ser Phe Leu Asp Phe Cys Tyr Ser Ser Thr Val Val Pro Gln
                   70
Thr Leu Val Asn Phe Leu Ala Lys Arg Lys Val Ile Ser Tyr Phe Gly
                                   90
Cys Met Thr Gln Met Phe Phe Tyr Ala Gly Phe Ala Thr Ser Glu Cys
                               105
Tyr Leu Ile Ala Ala Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys Asn
                                               125
                          120
Pro Leu Leu Tyr Ser Thr Ile Met Ser Pro Glu Val Cys Ala Ser Leu
                                          140
                      135 -
Ile Val Gly Ser Tyr Ser Ala Gly Phe Leu Asn Ser Leu Ile His Thr
                  150
                                       155
Gly Cys Ile Phe Ser Leu Lys Phe Cys Gly Ala His Val Val Thr His
                                   170
               165
Phe Phe Cys Asp Gly Pro Pro Ile Leu Ser Leu Ser Cys Val Asp Thr
                               185
                                                  190
           180
Ser Leu Cys Glu Ile Leu Leu Phe Ile Phe Ala Gly Phe Asn Leu Leu
                           200
                                               205
Ser Cys Thr Leu Thr Ile Leu Ile Ser Tyr Phe Leu Ile Leu Asn Thr
                                           220
                       215
Ile Leu Lys Met Ser Ser Ala Gln Gly Arg Phe Lys Ala Phe Ser Thr
                                       235
                   230
Cys Ala Ser His Leu Thr Ala Ile Cys Leu Phe Phe Gly Thr Thr Leu
                                   250
               245
Phe Met Tyr Leu Arg Pro Arg Ser Ser Tyr Ser Leu Thr Gln Asp Arg
                               265
           260
Thr Val Ala Val Ile Tyr Thr Val Val Ile Pro Val Leu Asn Pro Leu
                          280
                                               285
Met Tyr Ser Leu Arg Asn Lys Asp Val Lys Lys Ala Leu Ile Lys Val
                      295
Trp Gly Arg Lys Thr Met Glu
```

```
<210> 1994
<211> 316
<212> PRT
<213> Unknown (H38g912 protein)
<220>
<223> Synthetic construct
<400> 1994
Met Gln Asn Gln Ser Phe Val Thr Glu Phe Val Leu Leu Gly Leu Ser
                                    10
Gln Asn Pro Asn Val Gln Glu Ile Val Phe Val Val Phe Leu Phe Val
                                25
            20
Tyr Ile Ala Thr Val Gly Gly Asn Met Leu Ile Val Val Thr Ile Leu
                            40
Ser Ser Pro Ala Leu Leu Val Ser Pro Met Tyr Phe Phe Leu Gly Phe
                        55
Leu Ser Phe Leu Asp Ala Cys Phe Ser Ser Val Ile Thr Pro Lys Met
                                        75
                    70
Ile Val Asp Ser Leu Tyr Val Thr Lys Thr Ile Ser Phe Glu Gly Cys
                                    90
               85
Met Met Gln Leu Phe Ala Glu His Phe Phe Ala Gly Val Glu Val Ile
                               105
Val Leu Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro
                           120
                                                125
Leu His Tyr Ser Ser Ile Met Asn Arg Arg Leu Cys Gly Ile Leu Met
                                            140
                        135
Gly Val Ala Trp Thr Gly Gly Leu Leu His Ser Met Ile Gln Ile Leu
                                        155
                    150
Phe Thr Phe Gln Leu Pro Phe Cys Gly Pro Asn Val Ile Asn His Phe
                                    170
                165
Met Cys Asp Leu Tyr Pro Leu Leu Glu Leu Ala Cys Thr Asp Thr His
                                185
                                                    190
Ile Phe Gly Leu Met Val Val Ile Asn Ser Gly Phe Ile Cys Ile Ile
                            200
                                               205
Asn Phe Ser Leu Leu Leu Val Ser Tyr Ala Val Ile Leu Leu Ser Leu
                                            220
                       215
Arg Thr His Ser Ser Glu Gly Arg Trp Lys Ala Leu Ser Thr Cys Gly
                    230
                                        235
Ser His Ile Ala Val Val Ile Leu Phe Phe Val Pro Cys Ile Phe Val
                                    250
                245
Tyr Thr Arg Pro Pro Ser Ala Phe Ser Leu Asp Lys Met Ala Ala Ile
                                                    270
                               265
            260
Phe Tyr Ile Ile Leu Asn Pro Leu Leu Asn Pro Leu Ile Tyr Thr Phe
                           280
                                               285
Arg Asn Lys Glu Val Lys Gln Ala Met Arg Arg Ile Trp Asn Arg Leu
                      295
                                            300
Met Val Val Ser Asp Glu Lys Glu Asn Ile Lys Leu
                    310
<210> 1995
<211> 310
<212> PRT
<213> Unknown (H38g913 protein)
<220>
<223> Synthetic construct
<400> 1995
```

Met Gln Leu Asn Asn Asn Val Thr Glu Phe Ile Leu Leu Gly Leu Thr

```
10
Gln Asp Pro Phe Trp Lys Lys Ile Val Phe Val Ile Phe Leu Arg Leu
                               25
Tyr Leu Gly Thr Leu Leu Gly Asn Leu Leu Ile Ile Ser Val Lys
                           40
Ala Ser Gln Ala Leu Lys Asn Pro Met Phe Phe Phe Leu Phe Tyr Leu
                       55
Ser Leu Ser Asp Thr Cys Leu Ser Thr Ser Ile Ala Pro Arg Met Ile
                                       75
Val Asp Ala Leu Leu Lys Lys Thr Thr Ile Ser Phe Ser Glu Cys Met
                                   90
Ile Gln Val Phe Ser Ser His Val Phe Gly Cys Leu Glu Ile Phe Ile
                               105
Leu Ile Leu Thr Ala Val Asp Arg Tyr Val Asp Ile Cys Lys Pro Leu
                           120
His Tyr Met Thr Ile Ile Ser Gln Trp Val Cys Gly Val Leu Met Ala
                                           140
                       135
Val Ala Trp Val Gly Ser Cys Val His Ser Leu Val Gln Ile Phe Leu
                   150
                                       155
Ala Leu Ser Leu Pro Phe Cys Gly Pro Asn Val Ile Asn His Cys Phe
                                   170
               165
Cys Asp Leu Gln Pro Leu Leu Lys Gln Ala Cys Ser Glu Thr Tyr Val
                               185
          180
Val Asn Leu Leu Leu Val Ser Asn Ser Gly Ala Ile Cys Ala Val Ser
                           200
                                               205
Tyr Val Met Leu Ile Phe Ser Tyr Val Ile Phe Leu His Ser Leu Arg
                       215
                                           220
Asn His Ser Ala Glu Val Ile Lys Lys Ala Leu Ser Thr Cys Val Ser
                                       235
                   230
His Ile Ile Val Val Ile Leu Phe Phe Gly Pro Cys Ile Phe Met Tyr
                                   250
               245
Thr Cys Pro Ala Thr Val Phe Pro Met Asp Lys Met Ile Ala Val Phe
                               265
Tyr Thr Val Gly Thr Ser Phe Leu Asn Pro Val Ile Tyr Thr Leu Lys
                           280
                                                285
Asn Thr Glu Val Lys Ser Ala Met Arg Lys Leu Trp Ser Lys Lys Leu
Ile Thr Asp Asp Lys Arg
<210> 1996
<211> 321
<212> PRT
<213> Unknown (H38g914 protein)
<220>
<223> Synthetic construct
<221> VARIANT
<222> (1)...(321)
<223> Xaa = Any Amino Acid
<400> 1996
Met Glu Thr Thr Asn His Ser Ala Val Thr Glu Phe Phe Leu Val Gly
                                    10
Leu Ser Gln Tyr Pro Glu Leu Gln Leu Phe Leu Phe Leu Cys Leu
                                25
          20
Ile Met Tyr Met Ile Ile Leu Leu Gly Asn Ser Phe Leu Ile Ile Ile
                           40
Thr Ile Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Gly
```

```
Asn Leu Ser Phe Leu Gly Ile Cys Tyr Thr Ser Ser Ser Ile Pro Pro
                                        75
                   70
Met Leu Ile Ile Phe Val Ser Glu Arg Lys Ser Ile Ser Phe Ile Gly
                                    90
               85
Cys Ala Leu Gln Met Val Val Ser Leu Gly Leu Gly Ser Ile Glu Cys
                                105
            100
Ile Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                           120
                                               125
Pro Leu Arg Tyr Ser Ile Ile Met Asn Arg Val Leu Tyr Val Gln Met
                                            140
                       135
Ala Ala Trp Ser Trp Ile Ile Gly Cys Leu Thr Ser Leu Leu Arg Thr
                   150
                                       155
Val Leu Thr Met Met Leu Pro Phe Cys Gly Asn Asn Ile Ile Asp His
                                   170
               165
Leu Thr Cys Glu Ile Leu Ala Leu Leu Lys Val Ile Cys Ser Asp Ile
           180
                                185
                                                   190
Ser Ile Asn Val Phe Ile Met Thr Val Ser Ser Ile Val Leu Leu Val
                                        205
                           200
Ile Leu Leu Ile Phe Ile Ser Tyr Val Phe Ile Leu Ser Ser Ile Leu
                                            220
                       215
Arg Ile Asn Ser Ala Glu Gly Arg Lys Lys Ala Phe Phe Thr Cys Ser
                                       235
                   230
Ala His Leu Thr Val Val Ile Leu Phe Tyr Gly Ser Val Leu Phe Met
               245
                                   250
His Met Lys Pro Lys Ser Lys Phe Thr Thr Ala Ser Asp Glu Ile Ile
           260
                               265
                                                    270
Gly Leu Ser Tyr Glu Val Ile Thr Pro Met Asn Pro Ile Ile Tyr Ser
                                                285
       275
                           280
Leu Arg Asn Lys Glu Ile Lys Glu Ala Val Lys Lys Ile Leu Ser Arg
                                            300
                       295
His Val His Leu Trp Lys Ile Xaa Lys Ala Leu Arg His Val Thr Phe
305
                   310
Ser
```

- <210> 1997
- <211> 177
- <212> PRT
- <213> Unknown (H38g915 protein)
- <220>
- <223> Synthetic construct
- <221> VARIANT
- <222> (1)...(177)
- <223> Xaa = Any Amino Acid
- <400> 1997
- Ala Val Xaa Trp Ile Ser Ala Glu Phe Ala Leu Pro Met Tyr Phe Phe 5 10 1 Leu Lys Asn Leu Ser Val Leu Asp Leu Cys Tyr Ile Ser Val Thr Val 25 30 20 Pro Lys Ser Ile Arg Asn Ser Leu Thr Arg Arg Ser Ser Ile Ser Tyr 40 Leu Gly Cys Val Ala Gln Ala Tyr Phe Phe Ser Ala Phe Ala Ser Ala 55 60 Glu Leu Ala Phe Leu Thr Val Met Ser Tyr Asp Arg Tyr Val Ala Ile 75 Cys His Pro Leu Gln Tyr Arg Ala Val Met Thr Ser Gly Gly Cys Tyr 90

Gln Met Ala Val Thr Thr Trp Leu Ser Cys Phe Ser Tyr Ala Ala Val

```
105
           100
His Thr Gly Asn Met Phe Arg Glu His Val Cys Arg Ser Asn Val Ile
                                              125
                           120
His Gln Phe Phe Arg Asp Ile Pro Gln Val Leu Ala Leu Val Ser Xaa
                                          140
                       135
Glu Val Phe Phe Val Glu Leu Xaa Pro Ser Pro Glu Pro Gln Cys Leu
                                    155
                150
Asp Leu Gly Cys Phe Ile Pro Met Met Ile Ser Asn Phe Pro Asn Leu
                                170
               165
Leu
<210> 1998
<211> 191
<212> PRT
<213> Unknown (H38g916 protein)
<220>
<223> Synthetic construct
<221> VARIANT
<222> (1)...(191)
<223> Xaa = Any Amino Acid
<400> 1998
Val Xaa Trp Ile Ser Ala Glu Phe Ala Leu Pro Met Tyr Leu Phe Leu
               5
                                   10
Ser Asp Leu Ser Phe Leu Asp Leu Cys Phe Thr Thr Ser Cys Val Pro
                                                   30
                               25
       20
Gln Met Leu Val Asn Leu Trp Gly Pro Lys Lys Thr Ile Ser Phe Leu
                                               45
    35
                           40
Gly Cys Ser Val Gln Leu Phe Ile Phe Leu Ser Leu Gly Thr Thr Glu
                                           60
                       55
Cys Ile Leu Leu Thr Val Met Ala Phe Asp Arg Tyr Val Ala Val Cys
                                       75
                   70
Gln Pro Leu His Tyr Ala Thr Ile Ile His Pro Arg Leu Cys Trp Gln
                                   90
               85
Leu Ala Ser Val Ala Trp Val Met Ser Leu Val Gln Ser Ile Val Gln
                               105
           100
Thr Ser Ser Thr Leu His Leu Pro Phe Cys Pro His Gln Gln Ile Asp
                           120
                                               125
Asp Phe Leu Cys Glu Val Pro Ser Leu Ile Arg Leu Ser Xaa Gly Asp
                       135
                                          140
Thr Ser Tyr Asn Glu Ile Gln Leu Thr Val Ser Ser Val Ile Leu Val
                                       155
                   150
Asp Val Pro Leu Ser Leu Ile Leu Ala Ser Tyr Gly Ala Thr Ala Gln
                                   170
               165
Ala Gly Leu Arg Ile Asn Phe Ala Lys Ala Trp Lys Lys Gly Leu
                               185
            180
<210> 1999
<211> 134
<212> PRT
<213> Unknown (H38g921 protein)
<220>
<223> Synthetic construct
<400> 1999
Cys Tyr Pro Leu Gln Leu Arg Lys Pro Phe Met Ser Ser Leu Ala Leu
                                   10
```

```
Gln Ala Gln Ala Trp Pro Trp Val Pro Gly Ser Gly Gly Phe Val Ala
                                25
 Ile Ala Val Pro Thr Ser Pro Ser Ser Ser Gly Leu Ser Phe Cys Gly
                            40
 Pro Pro Val Ala Ile Asn His Phe Leu Ser Cys Asp Ile Ala Pro Leu
                        55
                                            60
 Ile Ala Leu Ala Cys Thr Gln His Thr Gly Ser Glu Ser Phe Val Ala
                    70
                                        75
Phe Val Ile Ala Val Val Ile Leu Ser Ser Cys Leu Ile Thr Leu
                                    90
Val Ser His Met Cys Thr Ser Ser Ser Thr Ile Leu Arg Ile Pro Ser
            100
                               105
Ala Ser Gly Arg Lys Gln Ser Leu Ser Pro Arg Ala Pro Arg His Leu
       115
                         120
Thr Val Val Leu Ile Leu
    130
<210> 2000
<211> 196
<212> PRT
<213> Unknown (H38g924 protein)
<223> Synthetic construct
<221> VARIANT
<222> (1)...(196)
<223> Xaa = Any Amino Acid
<400> 2000
Thr Pro Pro Met Tyr Phe Leu Phe Leu Gly Glu Ala Glu Cys Phe Leu
                                    10
Leu Ala Thr Met Glu Tyr Asp Arg Tyr Glu Asp Ile Cys Ser Pro Leu
                                25
Asn Tyr Pro Val Ile Met Asn Gln Arg Thr Arg Ala Lys Leu Ala Gly
        35
                            40
Asp Ser Trp Val Pro Ser Phe Pro Glu Ala Thr Glu Gln Ala Thr Met
                        55
Ala Leu Arg Phe Pro Phe Xaa Gly Thr Asn Lys Val Asn His Leu Phe
                   70
                                       75
Leu Arg Gln Pro Ala Val Leu Lys Ala Gly Leu Met Gln Asp Thr Ala
               85
                                   90
Leu Phe Glu Ile Tyr Ala Ile Val Gly Thr Ile Leu Val Ala Met Asn
                                105
                                                    110
Pro Cys Leu Leu Ile Leu Ser Ser Tyr Thr Arg Ile Gly Ala Ala Ile
                           120
                                                125
Pro Gln Glu Pro Ile Lys Leu Lys Gly Lys Gln Xaa Arg Pro Phe Ser
                       135
                                           140
Thr Cys Ser Xaa His Leu Pro Trp Trp Pro Leu Phe Ser Asn Ile Ile
                   150
                                       155
Ile Xaa Ala Ser Thr Tyr Phe Leu Gly Leu Lys Ser Asn Lys Phe Phe
               165
                                   170
Trp Arg Gly Lys Lys Val Val Phe Ile Tyr Thr Thr Leu Val Glu Thr
           180
                              185
Pro Xaa Trp Asn
       195
<210> 2001
<211> 128
<212> PRT
<213> Unknown (H38g925 protein)
```

```
<220>
<223> Synthetic construct
<221> VARIANT
<222> (1)...(128)
<223> Xaa = Any Amino Acid
<400> 2001
His Cys Met Phe Leu Ala His Gly Ser Pro Leu Pro Pro Thr Gln Leu
                                    10
1
Pro Ile Xaa Phe Cys Asp Tyr Ile Ser His Arg Tyr Leu Thr Cys His
                                25
           20
Leu Ser Leu Pro Asn Ser Phe Ser Ser Ser Phe Pro Tyr Gln Xaa Ile
                            40
                                                45
Leu Pro Leu Ser Leu Leu Ala Gln Ala Arg Asn Pro Gly Ile Ile Phe
                        55
                                            60
Phe Leu Pro Thr Phe Asn Ala Leu Xaa Ser Pro Val His Ser Thr Ser
                   70
                                        75
Xaa Arg Leu Ser Leu Ser Thr Tyr Tyr Tyr Ala Ser Gln Glu Thr Ile
                                    90
               85
Ser Pro Arg Phe Asp Ser Thr Ala Val Ala Ser Tyr Leu Ile Phe Leu
                               105
                                                   110
His Leu Leu Trp Pro Ile Phe Asn Pro Phe Ile Tyr Cys Leu Arg Asn
                            120
       115
<210> 2002
<211> 192
<212> PRT
<213> Unknown (H38g926 protein)
<220>
<223> Synthetic construct
<400> 2002
Phe Phe Leu Thr Leu Ala Gly Ala Glu Ala Leu Leu Leu Thr Ser Met
                                    10
1
Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe Pro Leu His Tyr Leu Ile
           20
                                25
Arg Met Arg Lys Arg Val Cys Ala Leu Met Ile Thr Gly Ser Trp Met
                            40
                                                45
Ile Gly Ser Ile Asn Ser Cys Ala His Thr Val Tyr Ala Leu Arg Ile
                        55
                                            60
Pro Tyr Cys Lys Ser Arg Ala Ile Asn His Phe Phe Cys Asp Val Pro
                    70
                                        75
Ala Met Leu Thr Leu Ala Cys Thr Asp Thr Trp Val Tyr Glu Cys Thr
                                   90
Val Phe Leu Ser Thr Thr Ile Phe Leu Val Phe Pro Phe Ile Cys Ile
            100
                               105
                                                   110
Ala Cys Ser Tyr Gly Arg Ile Leu Leu Ala Val Tyr His Met His Ser
                           120
       115
                                               125
Ala Glu Gly Arg Lys Lys Ala Tyr Ser Thr Cys Ser Thr His Leu Thr
                       135
                                           140
Val Val Thr Phe Tyr Tyr Ala Pro Phe Ala Tyr Thr Tyr Leu Arg Pro
                   150
                                       155
Lys Ser Leu Arg Ser Pro Thr Glu Asp Lys Val Leu Ala Val Phe Phe
               165
                                   170
Phe Ile Ser Ser Phe Ser Ser Asn Pro Phe Met Tyr Thr Leu Arg Asn
                               185
```

<210> 2003

```
<211> 158
<212> PRT
<213> Unknown (H38g927 protein)
<220>
<223> Synthetic construct
<221> VARIANT
<222> (1)...(158)
<223> Xaa = Any Amino Acid
<400> 2003
Pro Met Tyr Phe Phe Leu Ser Met Leu Ser Ile Ser Glu Thr Cys Tyr
                5
                                   10
Met Val Ala Ile Thr Pro His Met Leu Ser Arg Leu Leu Asn Pro His
            20
                                25
Xaa Leu Ile Val Met Gln Gly Cys Val Thr Gln Leu Phe Tyr Val Thr
Phe Gly Ile Asn Asn Cys Phe Leu Leu Ile Ala Met Gly Tyr Asp Cys
                        55
Tyr Val Val Phe Cys Asn Pro Leu Arg Tyr Ser Xaa Val Arg Gly Leu
                    70
Cys Val Xaa Leu Gly Ser Gly Ser Leu Arg Ile Gly Leu Gly Met Ala
                                    90
Ile Val Gln Val Thr Ser Met Phe Gly Leu Pro Phe Cys Asp Asp Phe
                                105
           100
Val Ile Ser His Phe Phe Cys Asp Val Arg Pro Leu Leu Lys Leu Ala
                                                125
                            120
Cys Thr Asp Thr Thr Val Asn Glu Ile Ile Asn Phe Val Val Ser Val
                                           140
                        135
Cys Val Leu Val Leu His Ile Ala Leu Ile Phe Ile Ser Tyr
                    150
<210> 2004
<211> 192
<212> PRT
<213> Unknown (H38g928 protein)
<223> Synthetic construct
<221> VARIANT
<222> (1)...(192)
<223> Xaa = Any Amino Acid
<400> 2004
Leu Leu Ala Thr Lys Ala Tyr Asp Xaa Tyr Val Pro Ile Arg His Pro
                                    10
Phe Pro Tyr Pro Thr Arg Met Ser Pro Ala Met Cys Ala Ala Leu Val
                                25
            20
Gly Met Ala Trp Leu Val Ser His Gly Asn Ser Leu Leu Tyr Ile Leu
                            40
Leu Met Ala Arg Leu Ser Phe Leu Cys Phe Pro Thr Lys Cys Thr His
                        55
                                            60
Phe Phe Cys Asp Pro Pro Ser Leu Ser Xaa Arg Leu Ser Cys Ser Asp
                    70
                                        75
Asn His Thr Ser Lys Leu Leu Ile Phe Thr Lys Gly Ala Ala Val Val
                                    90
               85
Val Thr Pro Leu Leu Leu Ile Leu Ala Ser Leu Trp Asp His Asn Lys
                                105
                                                    110
Leu Thr Val Leu Gln Leu Pro Ser Thr Ser Gly Arg Leu Arg Asp Leu
```

```
120
                                               125
        115
Xaa Pro Thr Cys Gly Ser His Leu Asp Val Val Ser Leu Phe Tyr Arg
                        135
                                            140
Thr Val Ile Ala Val Tyr Phe Gln Ala Thr Ser Ser Thr Arg Ala Glu
                                        155
                    150
Trp Asp Arg Val Ala Thr Val Met Tyr Thr Val Val Thr Pro Met Leu
                165
                                    170
Asn Pro Ile Ile Tyr Ser Leu Thr Xaa Pro Arg Gly Arg Thr Leu Arg
                               185
                                                    190
<210> 2005
<211> 176
<212> PRT
<213> Unknown (H38g929 protein)
<220>
<223> Synthetic construct
<400> 2005
Arg Val Pro Pro Pro Met Tyr Phe Phe Leu Gly Asn Leu Ser Val Phe
Asp Met Gly Phe Ser Ser Val Thr Cys Pro Lys Met Leu Leu Tyr Leu
            20
                                25
Met Gly Leu Gly Arg Leu Ile Ser Tyr Lys Asp Cys Val Cys Gln Leu
       35
                           40
Phe Phe Phe His Phe Leu Gly Ser Ile Glu Cys Phe Leu Phe Thr Val
                       55
                                           60
Met Ala Tyr Asp Arg Phe Thr Ala Ile Cys Tyr Pro Leu Arg Tyr Thr
                                       75
                   70
Val Ile Met Asn Pro Arg Ile Cys Val Ala Leu Ala Val Gly Thr Trp
                                   90
               85
Leu Leu Gly Cys Ile His Ser Ser Ile Leu Thr Ser Leu Thr Phe Thr
                                105
Leu Pro His Cys Gly Pro Asn Glu Val Asp His Phe Phe Cys Asp Ile
        115
                           120
                                                125
Pro Ala Leu Leu Pro Leu Ala Cys Ala Asp Thr Ser Leu Ala Gln Arg
                       135
                                            140
Val Ser Phe Thr Asn Val Gly Leu Ile Ser Ala Gly Cys Phe Leu Leu
                  150
                                       155
Asn Leu Leu Ser Tyr Thr Arg Ile Thr Asn Ile Tyr Leu Lys His Ser
               165
                                   170
<210> 2006
<211> 44
<212> PRT
<213> Unknown (H38g930 protein)
<220>
<223> Synthetic construct
<221> VARIANT
<222> (1)...(44)
<223> Xaa = Any Amino Acid
<400> 2006
Cys Ile Lys Leu Gly Thr Glu Leu Gly Ser Thr Ser Asn Gly Arg Gln
                                   10
1
            5
Cys Ala Gly Ile Arg Pro Ser Tyr Val Phe Thr Leu His Leu Xaa Ala
                               25
Asn Val Asn Pro Phe Ile Tyr Thr Leu Ser Asn Lys
       35
                           40
```

```
<210> 2007
<211> 187
<212> PRT
<213> Unknown (H38g931 protein)
<220>
<223> Synthetic construct
<221> VARIANT
<222> (1)...(187)
<223> Xaa = Any Amino Acid
<400> 2007
Val Xaa Trp Ile Ser Ala Glu Phe Ala Leu Pro Met Tyr Leu Leu
                           10
Ser Gln Leu Ser Leu Met Asp Leu Met Tyr Ile Ser Thr Thr Val Pro
                           25
Lys Met Ala Tyr Asn Phe Leu Ser Gly Gln Lys Gly Ile Ser Phe Leu
                           40
Gly Cys Gly Val Gln Ser Phe Phe Phe Leu Thr Met Ala Cys Ser Glu
Gly Leu Leu Thr Ser Met Ala Tyr Asp Arg Tyr Leu Ala Ile Cys
                                       75
                   70
His Ser Leu Tyr Tyr Pro Ile Arg Met Ser Lys Met Met Cys Val Lys
               85
                                  90
Met Ile Gly Gly Ser Trp Thr Leu Gly Ser Ile Asn Ser Leu Ala His
                              105
           100
Thr Val Phe Ala Leu His Ile Pro Tyr Cys Arg Ser Arg Ala Ile Asp
                          120
                                               125
His Phe Phe Cys Asp Val Pro Ala Met Leu Leu Ser Cys Thr Asp
                                           140
                       135
Thr Trp Val Tyr Glu Tyr Met Val Leu Xaa Gly Gln Ser Leu Phe Leu
                   150
                                      155
Leu Leu Pro Phe Ile Gly Ile Thr Ser Ser Glu Gly Arg Val Leu Ile
                                  170
             165
Ala Gly Tyr Ile Met His Ser Lys Glu Gly Arg
           180
<210> 2008
<211> 62
<212> PRT
<213> Unknown (H38g934 protein)
<220>
<223> Synthetic construct
<221> VARIANT
<222> (1)...(62)
<223> Xaa = Any Amino Acid
<400> 2008
Gly Gly Asn Arg Lys Lys Arg Glu Lys Glu Gly Arg Lys Lys Arg Lys
                                   10
Val Arg Lys Lys Thr Gly Xaa Gly Arg Xaa Glu Val Gly Leu Leu Lys
                               25
Gly Ser Asn Ile Val Met Tyr Met Ala Pro Lys Tyr Arg His Pro Glu
                           40
Glu Gln Gln Lys Val Leu Phe Leu Phe Tyr Ser Ser Phe Asn
```

55

```
<210> 2009
<211> 103
<212> PRT
<213> Homo sapien (1000494-1-1-323)
<400> 2009
Pro Tyr Tyr Phe Cys Asp Leu Thr Pro Ile Leu Arg Leu Ser Val Thr
                                  10
Asp Thr Ser Cys Asn Arg Ile Phe Ile Leu Ile Val Ala Gly Met Val
           20
Ile Ala Thr Pro Phe Val Cys Ile Leu Ala Pro Tyr Ala Arg Ile Leu
                           40
Val Ala Ile Met Lys Val Pro Ser Ala Gly Gly Arg Lys Lys Ala Phe
                       55
Ser Ala Cys Ser Ser His Leu Ser Val Val Ala Leu Phe Tyr Gly Thr
                                       75
                  70
Thr Ile Gly Val Tyr Leu Cys Arg Ser Ser Val Leu Thr Thr Ala Lys
                               90
              85
Glu Lys Ala Ser Ala Val Met
           100
<210> 2010
<211> 314
<212> PRT
<213> Homo sapien (1336040-1-1-945)
<400> 2010
Met Glu Phe Thr Asp Arg Asn Tyr Thr Leu Val Thr Glu Phe Ile Leu
                                   10
Leu Gly Phe Pro Thr Arg Pro Glu Leu Gln Ile Val Leu Phe Leu Met
                               25
           20
Phe Leu Thr Leu Tyr Ala Ile Ile Leu Ile Gly Asn Ile Gly Leu Met
                           40
Leu Leu Ile Arg Ile Asp Pro His Leu Gln Thr Pro Met Tyr Phe Phe
                                           60
                       55
Leu Ser Asn Leu Ser Phe Val Asp Leu Cys Tyr Phe Ser Asp Ile Val
                   70
                                       75
Pro Lys Met Leu Val Asn Phe Leu Ser Glu Asn Lys Ser Ile Ser Tyr
                                   90
               85
Tyr Gly Cys Ala Leu Gln Phe Tyr Phe Phe Cys Thr Phe Ala Asp Thr
                              105
           100
Glu Ser Phe Ile Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile
                                               125
                           120
Cys Asn Pro Leu Leu Tyr Thr Val Val Met Ser Arg Gly Ile Cys Met
                       135
                                           140
Arg Leu Ile Val Leu Ser Tyr Leu Gly Gly Asn Met Ser Ser Leu Val
                                       155
                   150
His Thr Ser Phe Ala Phe Ile Leu Lys Tyr Cys Asp Lys Asn Val Ile
                                   170
               165
Asn His Phe Phe Cys Asp Leu Pro Pro Leu Leu Lys Leu Ser Cys Thr
           180
                               185
Asp Thr Thr Ile Asn Glu Trp Leu Leu Ser Thr Tyr Gly Ser Ser Val
                           200
                                               205
        195
Glu Ile Ile Cys Phe Ile Ile Ile Ile Ser Tyr Phe Phe Ile Leu
                                           220
                       215
Leu Ser Val Leu Lys Ile Arg Ser Phe Ser Gly Arg Lys Lys Thr Phe
                   230
                                       235
Ser Thr Cys Ala Ser His Leu Thr Ser Val Thr Ile Tyr Gln Gly Thr
                                   250
              245
Leu Leu Phe Ile Tyr Ser Arg Pro Ser Tyr Leu Tyr Ser Pro Asn Thr
                               265
```

```
Asp Lys Ile Ile Ser Val Phe Tyr Thr Ile Phe Ile Pro Val Leu Asn
        275
                           280
Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Asp Ala Ala Glu
                       295
   290
Lys Val Leu Arg Ser Lys Val Asp Ser Ser
                   310
<210> 2011
<211> 317
<212> PRT
<213> Homo sapien (1336042-1-1-954)
<400> 2011
Met Gly Thr Asp Asn Gln Thr Trp Val Ser Glu Phe Ile Leu Leu Gly
                                   10
Leu Ser Ser Asp Trp Asp Thr Arg Val Ser Leu Phe Val Leu Phe Leu
                               25
           20
Val Met Tyr Val Val Thr Val Leu Gly Asn Cys Leu Ile Val Leu Leu
                                               45
      35
                           40
Ile Arg Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Thr
                                          60
                      55
Asn Leu Ser Leu Val Asp Val Ser Tyr Ala Thr Ser Val Val Pro Gln
                   70
                                       75
Leu Leu Ala His Phe Leu Ala Glu His Lys Ala Ile Pro Phe Gln Ser
               85
                                   90
Cys Ala Ala Gln Leu Phe Phe Ser Leu Ala Leu Gly Gly Ile Glu Phe
                                                   110
           100
                               105
Val Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Val Cys Asp
                                               125
                           120
       115
Ala Leu Arg Tyr Ser Ala Ile Met His Gly Gly Leu Cys Ala Arg Leu
                                          140
                       135
Ala Ile Thr Ser Trp Val Ser Gly Phe Ile Ser Ser Pro Val Gln Thr
                                       155
                   150
Ala Ile Thr Phe Gln Leu Pro Met Cys Arg Asn Lys Phe Ile Asp His
                                   170
                                                       175
               165
                                        _
Ile Ser Cys Glu Leu Leu Ala Val Val Arg Leu Ala Cys Val Asp Thr
                               185
           180
Ser Ser Asn Glu Val Thr Ile Met Val Ser Ser Ile Val Leu Leu Met
                                               205
                          200
    195
Thr Pro Leu Cys Leu Val Leu Leu Ser Tyr Ile Gln Ile Ile Ser Thr
                                           220
                       215
Ile Leu Lys Ile Gln Ser Arg Glu Gly Arg Lys Lys Ala Phe His Thr
                                      235
                   230
Cys Ala Ser His Leu Thr Val Val Ala Leu Cys Tyr Gly Val Ala Ile
                                   250
               245
Phe Thr Tyr Ile Gln Pro His Ser Ser Pro Ser Val Leu Gln Glu Lys
                               265
Leu Phe Ser Val Phe Tyr Ala Ile Leu Thr Pro Met Leu Asn Pro Met
                                               285
       275
                           280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Gly Ala Trp Gln Lys Leu
                       295
Leu Trp Lys Phe Ser Gly Leu Thr Ser Lys Leu Ala Thr
                   310
<210> 2012
<211> 318
<212> PRT
<213> Homo sapien (1369835-1-20155-22741)
<220>
<221> VARIANT
```

```
<222> (1)...(318)
<223> Xaa = Any Amino Acid
<400> 2012
Met Asp Arg Val Asn Asn Ser Ala Val Ser Lys Phe Val Leu Ile Gly
                                   10
Leu Ser Ser Ser Trp Glu Met His Leu Phe Leu Phe Trp Phe Phe Ser
                                25
Val Phe Tyr Met Gly Ile Ile Leu Glu Asn Leu Phe Ile Val Phe Thr
                           40
Val Ile Ile Asp Ser His Leu Asn Ser Pro Val Tyr Cys Leu Leu Ala
                       55
Asn Ile Tyr Leu Leu Asp Leu Val Phe Ser Tyr Ser Ser Asp Phe Phe
                                        75
                    70
Thr Asn Cys Ser Ile Ile Ser Phe Pro Arg Cys Met Ile Gln Ile Phe
                                    90
               85
Phe Ile Cys Val Met Arg Lys Ile Glu Met Val Leu Leu Ile Thr Met
                                105
Ala Xaa Ser Arg Tyr Thr Ala Ile Cys Lys Pro Pro His Tyr Leu Thr
                                                125
                            120
Thr Met Asn Pro Lys Met Cys Val Ser Leu Leu Glu Ala Ser Trp Ile
                        135
                                            140
Val Arg Ile Ile His Ala Val Ser Gln Phe Val Phe Ala Ile Asn Leu
                                        155
                    150
Pro Phe Cys Gly Pro Asn Arg Val Gly Ser Phe His Cys Asp Phe Pro
                                    170
                165
Tyr Val Met Lys Leu Ala Cys Val Asp Thr Tyr Lys Leu Glu Val Val
                                185
            180
Val Thr Ala Asn Ser Gly Leu Ile Ser Ile Ala Thr Cys Phe Leu Leu
                            200
Ile Ile Ser Tyr Ile Phe Ile Ser Val Thr Val Xaa Asn Pro Ser Ser
                        215
                                            220
Gly Asp Leu Ser Lys Ala Phe Val Ser Cys Ser Asp His Ile Thr Val
                                       235
                   230
Gly Ile Leu Phe Phe Met Pro Cys Ile Phe Leu Tyr Val Xaa Pro Leu
                245
                                    250
Pro Lys Thr Thr His Asp Xaa Tyr Leu Phe Ile Val Pro Leu Leu Ser
                                265
            260
Pro Leu Ser Arg Ile Tyr Thr Leu Arg Asn Lys Asp Met Asn Val Ser
                                                285
                            280
Met Glu Arg Leu Gly Lys Trp Ile Ala Gly Ser Ser Arg Met Ser Xaa
                                            300
                       295
Xaa Met Val Leu Ser Arg Val Gln Asp Asp Ser Val Ser Pro
                    310
<210> 2013
<211> 319
<212> PRT
<213> Homo sapien (1857946-1-1-1049)
<220>
<221> VARIANT
<222> (1)...(319)
<223> Xaa = Any Amino Acid
<400> 2013
Phe Ser Ser Val Asn Asn Ser Cys Pro Arg Asn Val Arg Pro Val Leu
                                    10
Ser Val Trp Ala Met Tyr Leu Val Met Ile Gly Ser Ile Val Met Thr
                                25
Met Leu Gly Asn Met Ile Val Met Ile Ser Ile Ala His Phe Lys Gln
```

```
45
                            40
Leu His Ser Pro Thr Asn Phe Leu Ile Leu Ser Met Ala Ile Thr Asp
                                           60
                       55
Phe Leu Leu Ser Cys Val Val Met Pro Phe Ser Val Ile Thr Ser Ile
                                       75
                    70
Glu Ser Cys Trp Tyr Phe Gly Asp Leu Phe Cys Lys Val His Ser Cys
                85
                                   90
Cys Asp Ile Ile Leu Cys Thr Thr Ser Ile Phe His Leu Cys Phe Ile
                               105
                                                   110
           100
Ser Val Asp Arg Tyr Asp Ala Val Xaa Asp Pro Leu Gln Tyr Val Thr
                           120
                                               125
Arg Ile Thr Ile Pro Val Ile Glu Leu Phe Leu Leu Ile Ser Trp Ser
                        135
                                           140
Ile Pro Ile Leu Phe Ala Phe Gly Leu Val Phe Ser Lys Leu Asn Ile
                   150
                                       155
Ile Gly Ala Glu Glu Phe Val Ala Ala Ile Asp Cys Thr Gly Leu Cys
                                   170
               165
Val Leu Ile Phe Asn Lys Pro Gly Gly Val Leu Ala Ser Phe Ile Ala
                               185
                                                   190
           180
Phe Phe Leu Pro Gly Thr Thr Thr Val Gly Ile Tyr Ile His Ile Phe
                                               205
                           200
Thr Val Ala Arg Lys His Ala Met Gln Ile Gly Thr Gly Ser Arg Thr
                                           220
                       215
Lys Gln Ala Gly Ser Glu Ser Lys Lys Lys Trp His Pro Leu Lys Arg
                   230
                                        235
Glu Ser Lys Ala Thr Arg Thr Leu Gly Ile Val Met Gly Val Phe Val
                                    250
               245
Leu Cys Trp Leu Pro Phe Phe Val Leu Thr Ile Thr Asp Pro Phe Ile
                               265
           260
Asn Phe Thr Thr Leu Glu Asp Leu Tyr Asn Val Phe Leu Trp Leu Gly
                           280
                                               285
Tyr Phe Asn Ser Ala Phe Asn Ser Ile Leu Tyr Gly Met Leu Tyr Pro
                       295
                                           300
Trp Phe Arg Lys Ala Leu Arg Met Ile Val Thr Gly Met Ile Phe
                   310
                                        315
<210> 2014
<211> 134
<212> PRT
<213> Homo sapien (2358019-1-250070-250529)
<220>
<221> VARIANT
<222> (1)...(134)
<223> Xaa = Any Amino Acid
<400> 2014
Leu Leu Phe Leu Met Phe Phe Ile Thr Ser Leu Gly His Lys Phe His
                                   10
1 5
Leu Ile Ser Phe Pro Phe Ser Gln Gln Thr Thr Xaa Gln Lys Tyr Phe
                               25
                                                   30
Ile Ile Phe Glu Val Xaa Leu Cys Xaa Xaa His Thr Leu Thr Ala Leu
                           40
Ile Tyr Cys Xaa Met Ser Leu Phe Xaa Gly Ile Asp Leu Phe Val Gly
                       55
Tyr Asn Pro Cys Ser Pro Arg Val Leu Phe Leu Phe Leu Gly Arg Gly
                                        75
Pro Ser Gly Phe Ser Leu Glu Ser Leu Ser Phe Tyr Arg Thr Ser Phe
                                   90
                                                       95
Thr Trp Gln His Leu His Leu Lys Phe Tyr Cys Pro Ser Xaa Gly Xaa
          100
                               105
```

```
Leu Leu Lys Ser Phe Leu Ser Ala Ile Trp Leu Leu Phe Ser Thr Tyr
       115
                            120
Phe Leu Arg Val Leu Ser
    130
<210> 2015
<211> 127
<212> PRT
<213> Homo sapien (2447218-1-32642-33129)
<220>
<221> VARIANT
<222> (1)...(127)
<223> Xaa = Any Amino Acid
<400> 2015
Asn Leu Leu Pro Val Trp Thr Pro Gly Ser Arg Val Pro Ser Xaa Ser
                                    10
Gln Ile Ser Val Ser Glu Lys Gln Gly Met Ser Phe Pro Lys Lys Leu
                                25
Phe Gln Asn His Lys Leu Phe Leu Leu Phe Ala Gly Met Asn Val Phe
                            40
Leu Gln Thr Val Met Ala Tyr Asp His Phe Val Ala Ile Cys His Pro
                        55
Leu His Tyr Arg Val Ile Met Asn Pro Gly Ile Phe Gly Leu Trp Val
65
                    70
                                        75
Leu Val Ser Trp Ser Met Ser Ala Leu Asn Ser Ser Leu Gln Ser Arg
                85
Met Val Leu Gln Leu Ser Phe Cys Thr Asn Leu Glu Ile Pro His Ile
                                105
Phe Phe Cys Glu Leu Asn Gln Leu Ile Leu Leu Ala Cys Ser Asn
                            120
                                                125
        115
<210> 2016
<211> 216
<212> PRT
<213> Homo sapien (2921627-1-1-649)
<400> 2016
Leu Ile Asp Met Met Tyr Ile Ser Thr Ile Val Pro Lys Met Leu Val
                                    10
Asn Tyr Leu Leu Asp Gln Arg Thr Ile Ser Phe Val Gly Cys Thr Ala
                                25
Gln His Phe Leu Tyr Leu Thr Leu Val Gly Ala Glu Phe Phe Leu Leu
                            40
Gly Leu Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu Arg
                       55
Tyr Pro Val Leu Met Ser Arg Arg Val Cys Trp Met Ile Ile Ala Gly
                   70
                                       75
Ser Trp Phe Gly Gly Ser Leu Asp Gly Phe Leu Leu Thr Pro Ile Thr
                                    90
                85
Met Ser Phe Pro Phe Cys Asn Ser Arg Glu Ile Asn His Phe Phe Cys
           100
                                105
                                                    110
Glu Ala Pro Ala Val Leu Lys Leu Ala Cys Ala Asp Thr Ala Leu Tyr
                            120
                                                125
Glu Thr Val Met Tyr Val Cys Cys Val Leu Met Leu Leu Ile Pro Phe
                        135
Ser Val Val Leu Ala Ser Tyr Ala Arg Ile Leu Thr Thr Val Gln Cys
                    150
                                        155
Met Ser Ser Val Glu Gly Arg Lys Lys Ala Phe Ala Thr Cys Ser Ser
                                    170
```

His Met Thr Val Val Ser Leu Phe Tyr Gly Ala Ala Met Tyr Thr Tyr 185 180 190 Met Leu Pro His Ser Tyr His Lys Pro Ala Gln Asp Lys Val Leu Ser 200 Val Phe Tyr Thr Ile Leu Thr Pro 210 <210> 2017 <211> 216 <212> PRT <213> Homo sapien (2921629-1-1-649) <400> 2017 Phe Val Asp Met Gly Leu Thr Ser Ser Thr Val Thr Lys Met Leu Val 1 10 Asn Ile Gln Thr Arg His His Thr Ile Thr Tyr Thr Gly Cys Leu Thr 20 30 25 Gln Met Tyr Phe Phe Leu Met Phe Gly Asp Leu Asp Ser Phe Phe Leu 35 Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu Cys 55 60 Tyr Ser Thr Val Met Arg Pro Gln Val Cys Ala Leu Met Leu Ala Leu 70 75 Cys Trp Val Leu Thr Asn Ile Val Ala Leu Thr His Thr Phe Leu Met 90 Ala Arg Leu Ser Phe Cys Val Thr Gly Glu Ile Ala His Phe Phe Cys 100 105 Asp Ile Thr Pro Val Leu Lys Leu Ser Cys Ser Asp Thr His Ile Asn 115 120 125 Glu Met Met Val Phe Val Leu Gly Gly Thr Val Leu Ile Val Pro Phe 135 140 Leu Cys Ile Val Thr Ser Tyr Ile His Ile Val Pro Ala Ile Leu Arg 150 155 Val Arg Thr Arg Gly Gly Val Gly Lys Ala Phe Ser Thr Cys Ser Ser 165 170 His Leu Cys Val Val Cys Val Phe Tyr Gly Thr Leu Phe Ser Ala Tyr 180 185 Leu Cys Pro Pro Ser Ile Ala Ser Glu Glu Lys Asp Ile Ala Ala Ala 195 200 Ala Met Tyr Thr Ile Val Thr Pro 210 <210> 2018 <211> 212 <212> PRT <213> Homo sapien (2921634-1-1-653) <400> 2018 Cys His Ser Gln Val Ser Arg Leu Ala Gly Leu Gly Tyr Leu Glu Gly 10 Arg Arg Leu Ser Ser Tyr Asn Ala Cys Ala Ala Gln Met Phe Phe 20 25 Phe Val Ala Leu Ala Thr Val Glu Asn Ile Leu Leu Thr Ser Met Ala 40 Tyr Asp His Tyr Ile Ala Val Cys Lys Pro Leu His Tyr Thr Thr Thr Thr Ile Ala Ser Val Cys Ala His Leu Val Ile Gly Ser Tyr Val Cys 70 75 Gly Phe Leu Asn Ala Pro Leu Arg Ile Val Asp Ile Phe Ser Leu Ser 90 Phe Cys Lys Ser Asn Leu Val His His Leu Phe Cys Asp Val Pro Pro

```
100
                               105
Val Met Ala Val Ser Cys Ser Gly Lys His Ile Ser Lys Lys Ile Leu
        115
                120
                                           125
Val Phe Met Ser Ser Phe Asn Val Phe Leu Ala Leu Leu Val Ile Leu
                    135
                                          140
Thr Ser Tyr Leu Val Ile Phe Ile Thr Ile Leu Lys Met His Ser Ala
                                      155
                  150
Gln Gly His Leu Lys Ala Trp Ser Thr Gly Ala Pro His Leu Ile Ala
                                   170
Val Ser Ile Phe Tyr Gly Thr Thr Ile Phe Met Tyr Leu Gln Pro Ser
                              185
                                            190
Ser Ser His Ser Met Asp Thr Asp Glu Met Ala Ser Leu Phe Tyr Ala
    195
                        200
Val Phe Ile Ser
   210
<210> 2019
<211> 215
<212> PRT
<213> Homo sapien (2921639-1-1-647)
<400> 2019
Phe Val Asp Ile Cys Val Thr Ser Thr Thr Val Pro Lys Thr Leu Ser
                                  10
Asn Ile Arg Thr Gln Ser Lys Val Val Thr Tyr Ala Gly Cys Ile Thr
                                                  30
                              25
Gln Met Tyr Phe Phe Val Leu Phe Ile Val Leu Asp Ser Leu Leu Leu
       35
                          40
                                              45
Thr Val Met Ala Tyr Asp Gln Phe Val Ala Ile Cys His Pro Leu His
                       55
Tyr Thr Val Ile Val Asn Pro Arg Leu Cys Gly Leu Leu Val Leu Ala
65
                                       75
                  70
Ser Trp Ile Met Ser Ala Leu Asn Ser Leu Ile Glu Ser Leu Met Val
               85
                                   90
Leu Pro Leu Leu Phe Cys Thr Asp Leu Lys Ile Pro His Phe Phe Cys
                               105
Glu Leu Asn Gln Ile Ile Arg Ser Ala Cys Ser Asp Thr Phe Leu Asn
                          120
                                              125
Asp Met Val Met Tyr Met Ser Ala Val Leu Leu Gly Arg Gly Cys Phe
                       135
                                          140
Thr Gly Ile Leu Tyr Ser Tyr Phe Lys Thr Val Ser Ser Ile Arg Ala
                   150
                                       155
Ile Ser Ser Ala Gln Gly Lys Tyr Lys Ala Phe Ser Thr Cys Ala Ser
               165
                                  170
                                                      175
His Leu Ser Val Val Ser Leu Phe Tyr Cys Met Gly Leu Gly Val Tyr
                              185
                                                 190
           180
Leu Ser Ala Ala Ala Pro Thr His Ser Gln Val Gln Gln Pro Leu
                           200
Met Tyr Thr Val Val Thr Pro
   210
                       215
<210> 2020
<211> 212
<212> PRT
<213> Homo sapien (2921641-1-1-636)
<220>
<221> VARIANT
<222> (1)...(212)
<223> Xaa = Any Amino Acid
```

```
<400> 2020
Phe Val Asp Ile Ala Cys Ser Ser Ala Thr Ala Pro Lys Met Ile Val
                                   10
          5
Asp Ser Val Ser Glu Lys Lys Thr Ile Ser Tyr Trp Gly Cys Ile Thr
                               25
                                                   30
Gln Met Phe Thr Phe His Phe Phe Gly Cys Ala Asp Ile Phe Val Leu
                           40
Thr Val Met Ala Phe Asp Arg Tyr Ala Ala Ile Cys Gln Pro Leu Arg
                       55
Tyr Thr Val Ile Met Ser Ala Asn Ala Tyr Thr Val Leu Ala Ser Leu
                                       75
Ser Trp Leu Gly Ala Leu Gly His Ser Phe Val Gln Thr Leu Leu Thr
                                   90
Phe Gln Leu Pro Phe Cys Asn Ala Gln Val Ile Asp His Tyr Phe Cys
                              105
                                                   110
           100
Asp Val His Pro Val Leu Lys Leu Ala Cys Ala Asp Thr Thr Leu Val
                           120
                                               125
      115
Ser Met Leu Val Val Ala Asn Ser Gly Leu Ile Ser Leu Gly Cys Phe
                       135
                                           140
Leu Ile Leu Leu Ala Ser Tyr Thr Val Ile Leu Phe Ser Leu Gln Lys
                   150
                                      155
Gln Ser Ala Glu Ser Xaa His Lys Val Leu Ser Thr Cys Gly Ser His
                                   170
              165
Leu Thr Ile Val Thr Phe Phe Phe Val Pro Cys Thr Phe Ile Tyr Arg
                              185
                                                  190
          180
Pro Ser Thr Thr Phe Pro Leu Asp Lys Ala Val Ser Val Phe Tyr Thr
      195
                          200
Thr Ile Thr Pro
  210
<210> 2021
<211> 216
<212> PRT
<213> Homo sapien (2921661-1-1-649)
<400> 2021
Leu Ala Asp Ala Cys Phe Val Ser Thr Thr Val Pro Lys Met Leu Ala
                                   10
Asn Ile Gln Ile Gln Ser Gln Ala Ile Ser Tyr Ser Gly Cys Leu Leu
           20
                                                   30
                               25
Gln Leu Tyr Phe Phe Met Leu Phe Val Met Leu Glu Ala Phe Leu Leu
                           40
Ala Val Met Ala Tyr Asp Cys Tyr Val Ala Ile Cys His Pro Leu His
                       55
Tyr Ile Leu Ile Met Ser Pro Gly Leu Arg Ile Phe Leu Val Ser Ala
                   70
                                       75
Ser Trp Ile Met Asn Ala Leu His Ser Leu Leu His Thr Leu Leu Met
                                   90
               85
Asn Ser Leu Ser Phe Cys Ala Asn His Glu Ile Pro His Phe Leu Cys
           100
                               105
Asp Ile Asn Pro Leu Leu Gly Leu Ser Cys Thr Asp Pro Phe Thr Asn
                           120
                                               125
Glu Leu Val Ile Phe Ile Thr Gly Gly Leu Thr Gly Leu Ile Cys Val
                                           140
                       135
Leu Cys Leu Ile Ile Ser Tyr Thr Asn Val Phe Ser Thr Ile Leu Lys
                   150
                                       155
Ile Pro Ser Ala Gln Gly Lys Arg Lys Ala Phe Ser Thr Cys Ser Ser
                                  170
His Leu Ser Val Val Ser Leu Phe Phe Gly Thr Ser Phe Cys Val Asp
                                                  190
           180
                               185
Phe Ser Ser Pro Ser Thr His Ser Ala Gln Lys Asp Thr Val Ala Ser
```

```
205
                            200
        195
Val Met Tyr Thr Val Val Thr Pro
<210> 2022
<211> 216
<212> PRT
<213> Homo sapien (2921667-1-1-649)
<400> 2022
Val Leu Asp Val Gly Cys Ile Thr Val Thr Val Pro Ala Met Leu Gly
1
Arg Leu Leu Ser His Lys Ser Thr Ile Ser Tyr Asp Ala Cys Leu Ser
                                25
            20
Gln Leu Phe Phe Phe His Leu Leu Ala Gly Met Asp Cys Phe Leu Leu
                                                45
                            40
Thr Ala Met Ala Tyr Asp Arg Leu Leu Ala Ile Cys Gln Pro Leu Thr
                                            60
                        55
Tyr Ser Thr Arg Met Ser Gln Thr Val Gln Arg Met Leu Val Ala Ala
                                        75
                    70
Ser Trp Ala Cys Ala Phe Thr Asn Ala Leu Thr His Thr Val Ala Met
                                    90
                85
Ser Thr Leu Asn Phe Cys Gly Pro Asn Glu Val Asn His Phe Tyr Cys
                                105
                                                    110
            100
Asp Leu Pro Gln Leu Phe Gln Leu Ser Cys Ser Ser Thr Gln Leu Asn
                                                125
                            120
Glu Leu Leu Phe Val Ala Ala Ala Phe Met Ala Val Ala Pro Leu
                                            140
                        135
Val Phe Ile Ser Val Ser Tyr Ala His Val Val Ala Ala Val Pro Gln
                    150
                                        155
Ile Arg Ser Ala Glu Gly Arg Lys Lys Ala Phe Ser Thr Cys Gly Ser
                                   170
                165
His Leu Thr Val Val Gly Ile Phe Tyr Gly Thr Gly Val Phe Ser Tyr
                                                    190
                               185
Met Arg Leu Gly Ser Ala Glu Ser Ser Asp Lys Asp Lys Gly Val Gly
                            200
Val Phe Met Thr Val Ile Asn Pro
<210> 2023
<211> 215
<212> PRT
<213> Homo sapien (2921686-1-1-646)
<400> 2023
Trp Ala Asp Ile Ala Phe Thr Ser Ala Thr Val Pro Lys Met Ile Val
                                    10
 1
Asp Met Gln Ser His Arg Val Ile Ser Tyr Ala Ser Cys Leu Thr Gln
                                25
Met Ser Phe Phe Ala Leu Phe Ala Cys Ile Glu Asp Leu Leu Ile
                            40
Val Met Ala Tyr Asp Arg Phe Val Ala Val Cys His Ser Pro His Tyr
                                            60
                        55
Pro Val Ile Met Asn Pro Arg Leu Gly Val Phe Phe Val Leu Val Ser
                                        75
                    70
Phe Phe Leu Ser Leu Leu Asp Ser Gln Leu His Ser Trp Thr Val Leu
                85
Gln Phe Thr Phe Phe Lys Asn Val Glu Ile Ser Asn Phe Val Cys Asp
                                105
            100
Pro Ser Gln Leu Leu Asn Leu Ala Cys Ser Asp Ser Val Ile Asp Ser
                            120
```

```
Ile Phe Ile Tyr Leu Asp Ser Thr Met Phe Arg Phe Leu Pro Ile Ser
                       135
                                           140
Gly Ile Leu Leu Ser Tyr Ser Asn Ile Val Pro Ser Ile Leu Arg Ile
                                       155
                   150
Ser Ser Ser Asp Gly Lys Ser Lys Ala Phe Ser Thr Cys Arg Ser His
                                   170
               165
Leu Ala Val Val Cys Leu Phe Tyr Gly Thr Gly Ile Gly Val Tyr Leu
                               185
           180
Thr Thr Ala Ala Gly Thr Thr Pro Arg Ser Gly Val Val Val Ser Val
       195
                           200
Met Tyr Thr Val Val Thr Pro
   210
<210> 2024
<211> 217
<212> PRT
<213> Homo sapien (2921715-1-1-652)
<400> 2024
Ile Ile Asp Ile Ser Tyr Ala Ser Asn Lys Val Pro Lys Met Leu Thr
                                    10
               5
1
Asn Leu Gly Leu Asn Lys Arg Lys Thr Ile Ser Phe Val Pro Cys Thr
           20
                                25
Met Gln Thr Phe Leu Tyr Met Ala Phe Ala His Thr Glu Cys Leu Ile
                           40
Leu Val Met Met Ser Tyr Asp Arg Tyr Met Ala Ile Cys His Pro Leu
                       55
Gln Tyr Ser Val Ile Met Arg Trp Gly Val Cys Thr Val Leu Ala Val
                                       75
Thr Ser Trp Ala Cys Gly Ser Leu Leu Ala Leu Val His Val Val Leu
               85
                                   90
Ile Leu Arg Leu Pro Phe Cys Gly Pro His Glu Ile Asn His Phe Phe
                               105
           100
Cys Glu Ile Leu Ser Val Leu Lys Leu Ala Cys Ala Asp Thr Trp Leu
                            120
                                               125
       115
Asn Gln Val Val Ile Phe Ala Ala Ser Val Phe Ile Leu Val Gly Pro
                                           140
                       135
Leu Cys Leu Val Leu Val Ser Tyr Ser Arg Ile Leu Ala Ala Ile Leu
                                      155
                  150
Arg Ile Gln Ser Gly Glu Gly Arg Arg Lys Ala Phe Ser Thr Cys Ser
                                                      175
                                  170
              165
Ser His Leu Cys Met Val Gly Leu Phe Phe Gly Ser Ala Ile Val Met
                               185
           180
Tyr Met Ala Pro Lys Ser Arg His Pro Glu Glu Gln Gln Lys Val Leu
                                               205
    195
                           200
Ser Leu Phe Tyr Ser Leu Phe Asn Pro
                       215
<210> 2025
<211> 311
<212> PRT
<213> Homo sapien (3093312-1-33069-35776)
Met Asn Asp Asp Gly Lys Val Asn Ala Ser Ser Glu Gly Tyr Phe Ile
                5
                                   10
Leu Val Gly Phe Ser Asn Trp Pro His Leu Glu Val Val Ile Phe Val
           20
                               25
Val Val Leu Ile Phe Tyr Leu Met Thr Leu Ile Gly Asn Leu Phe Ile
                            40
Ile Ile Leu Ser Tyr Leu Asp Ser His Leu His Thr Pro Met Tyr Phe
```

```
60
                        55
Phe Leu Ser Asn Leu Ser Phe Leu Asp Leu Cys Tyr Thr Thr Ser Ser
                    70
Ile Pro Gln Leu Leu Val Asn Leu Trp Gly Pro Glu Lys Thr Ile Ser
                                   90
                85
Tyr Ala Gly Cys Met Ile Gln Leu Tyr Phe Val Leu Ala Leu Gly Thr
                               105
            100
Thr Glu Cys Val Leu Leu Val Val Met Ser Tyr Asp Arg Tyr Ala Ala
                           120
Val Cys Arg Pro Leu His Tyr Thr Val Leu Met His Pro Arg Phe Cys
                       135
His Leu Leu Ala Val Ala Ser Trp Val Ser Gly Phe Thr Asn Ser Ala
                                       155
                   150
Leu His Ser Ser Phe Thr Phe Trp Val Pro Leu Cys Gly His Arg Gln
                                   170
               165
Val Asp His Phe Phe Cys Glu Val Pro Ala Leu Leu Arg Leu Ser Cys
                               185
Val Asp Thr His Val Asn Glu Leu Thr Leu Met Ile Thr Ser Ser Ile
                                                205
                            200
Phe Val Leu Ile Pro Leu Ile Leu Ile Leu Thr Ser Tyr Gly Ala Ile
                                            220
                       215
Val Arg Ala Val Leu Arg Met Gln Ser Thr Thr Gly Leu Gln Lys Val
                                        235
                   230
Phe Gly Thr Cys Gly Ala His Leu Met Ala Val Ser Leu Phe Phe Ile
                                    250
               245
Pro Ala Met Cys Ile Tyr Leu Gln Pro Pro Ser Gly Asn Ser Gln Asp
                                265
Gln Gly Lys Phe Ile Ala Leu Phe Tyr Thr Val Val Thr Pro Ser Leu
                            280
                                                285
Asn Pro Leu Ile Tyr Thr Leu Arg Asn Lys Val Val Arg Gly Ala Val
                        295
Lys Arg Leu Met Gly Trp Glu
305
 . ; .
<210> 2026
<211> 330
<212> PRT
<213> Homo sapien (3108020-1-23117-23433)
<220>
<221> VARIANT
<222> (1)...(330)
<223> Xaa = Any Amino Acid
<400> 2026
Met Glu Pro Glu Asn Asp Thr Arg Ile Ser Glu Phe Arg Leu Leu Gly
Phe Ser Glu Glu Pro Arg Leu Gln Arg Phe Arg Phe Leu Phe Gly Val
Phe Leu Ser Met Tyr Leu Ile Ile Val Phe Gly Asn Leu Leu Ile Ile
Leu Val Ile Ile Leu Cys Ser His Leu His Thr Ser Met Tyr Phe Phe
                        55
Leu Ser Asn Leu Ser Phe Val Asp Ile Cys Phe Ala Ser Thr Arg Val
Pro Lys Met Leu Val Asn Ile Gln Ala Gln Ser Lys Val Ile Thr Ser
                                    90
Ala Gly Cys Ile Thr Gln Met Tyr Phe Phe Ile His Phe Val Gly Leu
                               105
Asp Ser Phe Leu Leu Thr Val Met Ala Tyr Asp Arg Phe Val Ala Ile
                            120
```

PCT/US00/27582 WO 01/27158

```
Cys His Pro Leu Tyr Tyr Thr Val Ile Met Asn Pro Gln Leu Cys Gly
                       135
                                            140
Leu Leu Val Leu Val Ser Trp Ile Thr Ser Val Leu His Ser Leu Leu
                                        155
                   150
His Ser Leu Met Val Leu Gln Leu Ser Leu Cys Arg Glu Leu Glu Ile
                                    170
               165
Pro His Phe Phe Cys Glu Leu Asn Gln Val Ile His Leu Ala Cys Ser
                                                    190
                                185
           180
Asp Thr Phe Leu Asn Asp Met Val Met Tyr Leu Ala Ala Val Leu Leu
                           200
                                                205
Gly Gly Gly Ser Leu Ala Gly Ile Leu Tyr Ser Tyr Ser Lys Ile Val
                                            220
                       215
Ser Ser Ile Cys Ala Ile Ser Ser Ala Gln Gly Lys Tyr Lys Ala Phe
                                        235
                  230
Ser Thr Cys Pro Ser His Leu Ser Val Val Ser Leu Phe Tyr Cys Thr
               245
                                    250
                                                        255
Ser Leu Gly Val Tyr Leu Ser Ser Ala Ala Ser His Asn Ser His Ser
                                                   270
                               265
Gly Ala Ile Ala Ser Val Arg Tyr Thr Val Val Thr Pro Met Leu Asn
                                               285
       275
                           280
Pro Phe Ile Tyr Ser Leu Arg Asn Lys Asp Ile Lys Arg Ala Leu Lys
                                           300
                       295
Asn Ser Leu Gly Gly Lys Leu Glu Lys Gly Gln Leu Ser Xaa Gly Leu
                  310
                                      315
Lys Leu Tyr Pro Xaa Leu Gln Gly Ser Lys
               325
<210> 2027
<211> 319
<212> PRT
<213> Homo sapien (3108020-1-37593-38822)
<400> 2027
Met Glu Arg Gly Asn Gln Thr Glu Val Gly Asn Phe Leu Leu Gly
                                    10
1
Phe Ala Glu Asp Ser Asp Met Gln Leu Leu Leu His Gly Leu Phe Leu
           20
                                25
Ser Met Tyr Leu Val Thr Ile Ile Gly Asn Leu Leu Ile Ile Leu Thr
                           40
       35
Ile Ser Ser Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                                            60
                       55
Asn Leu Ser Phe Ala Asp Ile Cys Phe Thr Ser Thr Thr Val Pro Lys
                                        75
                   70
Met Leu Val Asn Ile Gln Thr Gln Ser Lys Met Ile Thr Phe Ala Gly
                                   90
               85
Cys Leu Thr Gln Ile Phe Phe Phe Ile Ala Phe Gly Cys Leu Asp Asn
                               105
Leu Leu Leu Thr Met Thr Ala Tyr Asp Arg Phe Val Ala Ile Cys Tyr
                                                125
       115
                           120
Pro Leu His Tyr Thr Val Ile Met Asn Pro Arg Leu Cys Gly Leu Leu
                       135
                                            140
Val Leu Gly Ser Trp Cys Ile Ser Val Met Gly Ser Leu Leu Glu Thr
```

Leu Thr Ile Leu Arg Leu Ser Phe Cys Thr Asn Met Glu Ile Pro His

Phe Phe Cys Asp Pro Ser Glu Val Leu Lys Leu Ala Cys Ser Asp Thr

Phe Ile Asn Asn Ile Val Met Tyr Phe Val Thr Ile Val Leu Gly Val Phe Pro Leu Cys Gly Ile Leu Phe Ser Tyr Ser Gln Ile Phe Ser Ser

```
Val Leu Arg Val Ser Ala Arg Gly Gln His Lys Ala Phe Ser Thr Cys
                230
                                      235
Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Gly Leu Gly
                                   250
Val Tyr Leu Ser Ser Ala Val Thr Pro Pro Ser Arg Thr Ser Leu Ala
                               265
Ala Ser Val Met Tyr Thr Met Val Thr Pro Met Leu Asn Pro Phe Ile
                                               285
                           280
Tyr Ser Leu Arg Asn Lys Asp Met Lys Gly Ser Leu Gly Arg Leu Leu
                       295
                                           300
Leu Arg Ala Thr Ser Leu Lys Glu Gly Thr Ile Ala Lys Leu Ser
                   310
<210> 2028
<211> 315
<212> PRT
<213> Homo sapien (3184261-1-5713-7336)
<400> 2028
Met Glu Pro Glu Lys Gln Thr Glu Ile Ser Glu Phe Phe Leu Gln Gly
Leu Ser Glu Lys Pro Glu His Gln Thr Leu Leu Phe Thr Met Phe Leu
                                25
Ser Thr Tyr Leu Val Thr Ile Ile Gly Asn Ala Leu Ile Ile Leu Ala
       35
                            40
Ile Ile Thr Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Phe
                        55
Asn Leu Ser Leu Val Asp Thr Leu Leu Ser Ser Thr Thr Val Pro Lys
                                        75
                   70
Met Leu Ala Asn Ile Gln Ala Gln Ser Arg Ala Ile Pro Phe Val Gly
                                    90
Cys Leu Thr Gln Met Tyr Ala Phe His Leu Phe Gly Thr Met Asp Ser
                               105
Phe Leu Leu Ala Val Met Ala Ile Asp Arg Phe Val Ala Ile Val His
                                                125
                           120
Pro Gln Arg Tyr Leu Val Leu Met Cys Ser Pro Val Cys Gly Leu Leu
                                           140
                       135
Leu Gly Ala Ser Trp Met Ile Thr Asn Leu Gln Ser Leu Ile His Thr
                                        155
                   150
Cys Leu Met Ala Gln Leu Thr Phe Cys Ala Gly Ser Glu Ile Ser His
                                   170
               165
Phe Phe Cys Asp Leu Met Pro Leu Leu Lys Leu Ser Gly Ser Asp Thr
                               185
                                                    190
His Thr Asn Glu Leu Val Ile Phe Ala Phe Gly Ile Val Val Gly Thr
                                                205
                            200
Ser Pro Phe Ser Cys Ile Leu Leu Ser Tyr Ile Arg Ile Phe Trp Thr
                        215
                                           220
Val Phe Lys Ile Pro Ser Thr Arg Gly Lys Trp Lys Ala Phe Ser Thr
                                       235
                   230
Cys Gly Leu His Leu Thr Val Val Ser Leu Ser Tyr Gly Thr Ile Phe
                                   250
               245
Ala Val Tyr Leu Gln Pro Thr Ser Pro Ser Ser Ser Gln Lys Asp Lys
                               265
           260
Ala Ala Ala Leu Met Cys Gly Val Phe Ile Pro Met Leu Asn Pro Phe
                           280
Ile Tyr Ser Ile Arg Asn Lys Asp Met Lys Ala Ala Leu Gly Lys Leu
                       295
Ile Gly Lys Val Ala Val Pro Cys Pro Arg Pro
                   310
```

<210> 2029

```
<211> 318
<212> PRT
<213> Homo sapien (3213020-1-101040-103030)
<400> 2029
Met Trp Gln Lys Asn Gln Thr Ser Leu Ala Asp Phe Ile Leu Glu Gly
                                    10
Leu Phe Asp Asp Ser Leu Thr His Leu Phe Leu Phe Ser Leu Thr Met
            20
                                25
Val Val Phe Leu Ile Ala Val Ser Gly Asn Thr Leu Thr Ile Leu Leu
                            40
                                                45
Ile Cys Ile Asp Pro Gln Leu His Thr Pro Met Tyr Phe Leu Leu Ser
                        55
                                            60
Gln Leu Ser Leu Met Asp Leu Met His Val Ser Thr Thr Ile Leu Lys
                    70
                                        75
Met Ala Thr Asn Tyr Leu Ser Gly Lys Lys Ser Ile Ser Phe Val Gly
                                    90
Cys Ala Thr Gln His Phe Leu Tyr Leu Cys Leu Gly Gly Ala Glu Cys
                                105
            100
Phe Leu Leu Ala Val Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys His
                            120
                                                 125
Pro Leu Arg Tyr Ala Val Leu Met Asn Lys Lys Val Gly Leu Met Met
                        135
                                            140
Ala Val Met Ser Trp Leu Gly Ala Ser Val Asn Ser Leu Ile His Met
                                        155
                   150
Ala Ile Leu Met His Phe Pro Phe Cys Gly Pro Arg Lys Val Tyr His
                                    170
                165
                                                        175
Phe Tyr Cys Glu Phe Pro Ala Val Val Lys Leu Val Cys Gly Asp Ile
           180
                                185
                                                    190
Thr Val Tyr Glu Thr Thr Val Tyr Ile Ser Ser Ile Leu Leu Leu Leu
        195
                            200
                                                205
Pro Ile Phe Leu Ile Ser Thr Ser Tyr Val Phe Ile Leu Gln Ser Val
                       215
                                            220
Ile Gln Met Arg Ser Ser Gly Ser Lys Arg Asn Ala Phe Ala Thr Cys
                    230
                                        235
Gly Ser His Leu Thr Val Val Ser Leu Trp Phe Gly Ala Cys Ile Phe
                                    250
                245
Ser Tyr Met Arg Pro Arg Ser Gln Cys Thr Leu Leu Gln Asn Lys Val
                                265
                                                    270
            260
Gly Ser Val Phe Tyr Ser Ile Ile Thr Pro Thr Leu Asn Ser Leu Ile
                            280
Tyr Thr Leu Arg Asn Lys Asp Val Ala Lys Ala Leu Arg Arg Val Leu
                       295
                                            300
Arg Arg Asp Val Ile Thr Gln Cys Ile Gln Arg Leu Gln Leu
                    310
<210> 2030
<211> 114
<212> PRT
<213> Homo sapien (32504-1-1-343)
<400> 2030
Val Cys His Pro Leu His Tyr Met Ile Ile Met Asn Pro His Leu Cys
                                    10
Gly Leu Leu Val Phe Val Thr Trp Leu Ile Gly Val Met Thr Ser Leu
           20
                                25
Leu His Ile Ser Leu Met Met His Leu Ile Phe Cys Lys Asp Phe Glu
                            40
Ile Pro His Phe Phe Cys Glu Leu Thr Tyr Ile Leu Gln Leu Ala Cys
                        55
                                            60
Ser Asp Thr Phe Leu Asn Ser Thr Leu Ile Tyr Phe Met Thr Gly Val
```

```
70
                                         75
Leu Gly Val Phe Pro Leu Leu Gly Ile Ile Phe Ser Tyr Ser Arg Ile
                                    90
Ala Ser Ser Ile Arg Lys Met Ser Ser Ser Gly Gly Lys Gln Lys Ala
                                105
Leu Ser
<210> 2031
<211> 114
<212> PRT
<213> Homo sapien (32508-1-1-343)
<400> 2031
Ile Val Ser Pro Leu Leu Tyr Thr Val Ala Met Ser Asp Arg Lys Cys
                                   10
                5
Val Glu Leu Val Thr Gly Ser Trp Ile Gly Gly Ile Val Asn Thr Leu
            20
                                25
Ile His Thr Ile Ser Leu Arg Arg Leu Ser Phe Cys Arg Leu Asn Ala
                            40
                                               45
Val Ser His Phe Phe Cys Asp Ile Pro Ser Leu Leu Lys Leu Ser Cys
                        55
Ser Asp Thr Ser Met Asn Glu Leu Leu Leu Leu Thr Phe Ser Gly Val
                                        75
Ile Ala Met Ala Thr Phe Leu Thr Val Ile Ile Ser Tyr Ile Phe Ile
                                    90
Ala Phe Ala Ser Leu Arg Ile His Ser Ala Ser Gly Arg Gln Gln Ala
                                105
Phe Ser
<210> 2032
<211> 112
<212> PRT
<213> Homo sapien (32509-1-1-338)
<400> 2032
Ile Cys His Pro Leu Arg Tyr Thr Thr Ile Met Lys Glu Gly Leu Cys
                                    10
Asn Leu Leu Val Thr Val Ser Trp Ile Leu Ser Cys Thr Asn Ala Leu
            20
                                25
Ser His Thr Leu Leu Ala Gln Leu Ser Phe Cys Ala Asp Asn Thr
                            40
Ile Pro His Phe Phe Cys Asp Leu Val Ala Leu Leu Lys Leu Ser Cys
Ser Asp Ile Ser Leu Asn Glu Leu Val Ile Phe Thr Val Gly Gln Ala
Val Ile Thr Leu Pro Leu Ile Cys Ile Leu Ile Ser Tyr Gly His Ile
               85
                                    90
Gly Val Thr Ile Leu Lys Ala Pro Ser Thr Lys Gly Ile Phe Lys Ala
                                105
<210> 2033
<211> 114
<212> PRT
<213> Homo sapien (32513-1-1-343)
Ile Cys Tyr Pro Leu Arg Tyr Thr Ala Ile Met Asn Pro Arg Ile Cys
                                   10
Val Ala Leu Ala Val Gly Thr Trp Leu Leu Gly Cys Ile His Ser Ser
```

```
25
Ile Leu Thr Ser Leu Thr Phe Thr Leu Pro Tyr Cys Gly Pro Asn Glu
                            40
                                                45
Val Asp His Phe Phe Cys Asp Ile Pro Ala Leu Leu Pro Leu Ala Cys
                        55
                                            60
Ala Asp Thr Ser Leu Ala Gln Arg Val Ser Phe Thr Ser Val Gly Leu
                                        75
                   70
Ile Ser Leu Val Cys Phe Leu Leu Ile Leu Leu Ser Tyr Thr Arg Ile
                                    90
               85
Thr Ile Ser Ile Leu Ser Ile Arg Thr Thr Glu Gly Arg Arg Arg Ala
                                105
Phe Ser
<210> 2034
<211> 114
<212> PRT
<213> Homo sapien (32518-1-1-343)
<400> 2034
Ile Cys Lys Pro Leu Leu Tyr Pro Ala Ile Met Thr Asn Gly Leu Cys
                                    10
Ile Arg Leu Leu Ile Leu Ser Tyr Val Gly Gly Leu Leu His Ala Leu
            20
                                25
Ile His Glu Gly Phe Leu Phe Arg Leu Thr Phe Cys Asn Ser Asn Ile
                            40
Val His His Ile Tyr Cys Asp Ile Ile Pro Leu Ser Lys Ile Ser Cys
                        55
                                            60
Thr Asp Ser Ser Ile Asn Phe Leu Met Val Phe Ile Phe Ser Gly Ser
                   70
                                        75
Ile Gln Val Phe Ser Ile Val Thr Ile Leu Val Ser Tyr Thr Phe Val
                                    90
Leu Phe Ala Ile Leu Lys Arg Lys Ser Asp Lys Gly Val Arg Lys Ala
                                105
            100
Phe Ser
<210> 2035
<211> 148
<212> PRT
<213> Homo sapien (3289998-1-93404-94343)
<400> 2035
Met Val Leu Trp Leu Ser Phe Cys Thr Asp Leu Glu Ile Pro His Phe
1
Phe Cys Glu Leu Asn Gln Val Ile His Leu Ala Cys Ser Asp Thr Phe
                                25
Leu Asn Asp Met Gly Met Tyr Phe Ala Ala Gly Leu Leu Ala Gly Gly
                            40
Pro Leu Val Gly Ile Leu Cys Ser Tyr Ser Lys Ile Val Ser Ser Ile
                                            60
Arg Ala Ile Ser Ser Ala Gln Gly Lys Tyr Lys Ala Phe Ser Thr Cys
                                        75
                    70
Ala Ser His Leu Ser Val Val Ser Leu Phe Cys Cys Thr Gly Leu Gly
                                    90
               85
Val Tyr Leu Thr Ser Ala Ala Thr His Asn Ser His Thr Ser Ala Thr
                                                    110
            100
                                105
Ala Ser Val Met Tyr Thr Val Ala Thr Pro Met Leu Asn Pro Phe Ile
                                               125
                            120
Tyr Ser Leu Arg Asn Lys Asp Ile Lys Arg Ala Leu Lys Met Ser Phe
```

ŝ

135

130

```
Arg Gly Lys Gln
145
<210> 2036
<211> 312
<212> PRT
<213> Homo sapien (3402736-1-7079-10933)
<400> 2036
Met Ser Ala Asn Thr Ser Met Val Thr Glu Phe Leu Leu Gly Phe
Ser His Leu Ala Asp Leu Gln Gly Leu Leu Phe Ser Val Phe Leu Thr
            20
                                25
Ile Tyr Leu Leu Thr Val Ala Gly Asn Phe Leu Ile Val Val Leu Val
                            40
                                                45
Ser Thr Asp Ala Ala Leu Gln Ser Pro Met Tyr Phe Phe Leu Arg Thr
                        55
Leu Ser Ala Leu Glu Ile Gly Tyr Thr Ser Val Thr Val Pro Leu Leu
                                        75
                    70
Leu His His Leu Leu Thr Gly Arg Arg His Ile Ser Arg Ser Gly Cys
                                    90
Ala Leu Gln Met Phe Phe Phe Leu Phe Phe Gly Ala Thr Glu Cys Cys
                                105
Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys Glu Pro
                            120
                                                125
Leu Arg Tyr Pro Leu Leu Ser His Arg Val Cys Leu Gln Leu Ala
                        135
                                            140
Gly Ser Ala Trp Ala Cys Gly Val Leu Val Gly Leu Gly His Thr Pro
                   150
                                        155
Phe Ile Phe Ser Leu Pro Phe Cys Gly Pro Asn Thr Ile Pro Gln Phe
                                    170
                165
                                                        175
Phe Cys Glu Ile Gln Pro Val Leu Gln Leu Val Cys Gly Asp Thr Ser
            180
                                185
                                                    190
Leu Asn Glu Leu Gln Ile Ile Leu Ala Thr Ala Leu Leu Ile Leu Cys
       195
                           200
Pro Phe Gly Leu Ile Leu Gly Ser Tyr Gly Arg Ile Leu Val Thr Ile
                       215
                                           220
Phe Arg Ile Pro Ser Val Ala Gly Arg Arg Lys Ala Phe Ser Thr Cys
                   230
                                        235
Ser Ser His Leu Ile Val Val Ser Leu Phe Tyr Gly Thr Ala Leu Phe
                245
                                    250
Ile Tyr Ile Arg Pro Lys Ala Ser Tyr Asp Pro Ala Thr Asp Pro Leu
            260
                                265
Val Ser Leu Phe Tyr Ala Val Val Thr Pro Ile Leu Asn Pro Ile Ile
                            280
Tyr Ser Leu Arg Asn Thr Glu Val Lys Ala Ala Leu Lys Arg Thr Ile
                        295
Gln Lys Thr Val Pro Met Glu Ile
305
                    310
<210> 2037
<211> 305
<212> PRT
<213> Homo sapien (3522966-1-8581-12533)
<400> 2037
Met Val Thr Glu Phe Ile Phe Leu Gly Leu Ser Asp Ser Gln Gly Leu
1
                 5
                                    10
Gln Thr Phe Leu Phe Met Leu Phe Phe Val Phe Tyr Gly Gly Ile Val
           20
                                25
```

Phe Gly Asn Leu Leu Ile Val Ile Thr Val Val Ser Asp Ser His Leu

```
40
His Ser Pro Met Tyr Phe Leu Leu Ala Asn Leu Ser Leu Ile Asp Leu
                       55
Ser Leu Ser Ser Val Thr Ala Pro Lys Met Ile Thr Asp Phe Phe Ser
                                       75
Gln Arg Lys Val Ile Ser Phe Lys Gly Cys Leu Val Gln Ile Phe Leu
                                   90
Leu His Phe Phe Gly Gly Ser Glu Met Val Ile Leu Ile Ala Met Gly
                              105
                                                   110
           100
Phe Asp Arg Tyr Ile Ala Ile Cys Lys Pro Leu His Tyr Thr Thr Ile
                           120
Met Cys Gly Asn Ala Cys Val Gly Ile Met Ala Val Ala Trp Gly Ile
                                           140
                       135
   130
Gly Phe Leu His Ser Val Ser Gln Leu Ala Phe Ala Val His Leu Pro
         0 150
                                       155
Phe Cys Gly Pro Asn Glu Val Asp Ser Phe Tyr Cys Asp Leu Pro Arg
                                   170
               165
Val Ile Lys Leu Ala Cys Thr Asp Thr Tyr Arg Leu Asp Ile Met Val
           180
                               185
Ile Ala Asn Ser Gly Val Leu Thr Val Cys Ser Phe Val Leu Leu Ile
                                               205
                           200
Ile Ser Tyr Thr Ile Ile Leu Met Thr Ile Gln His Arg Pro Leu Asp
                                           220
                       215
Lys Ser Ser Lys Ala Leu Ser Thr Leu Thr Ala His Ile Thr Val Val
                   230
                                       235
Leu Leu Phe Phe Gly Pro Cys Val Phe Ile Tyr Ala Trp Pro Phe Pro
               245
                                   250
Ile Lys Ser Leu Asp Lys Phe Leu Ala Val Phe Tyr Ser Val Ile Thr
                               265
           260
Pro Leu Leu Asn Pro Ile Ile Tyr Thr Leu Arg Asn Lys Asp Met Lys
                           280
                                               285
Thr Ala Ile Arg Gln Leu Arg Lys Trp Asp Ala His Ser Ser Val Lys
                       295
Phe
305
<210> 2038
<211> 142
<212> PRT
<213> Homo sapien (3738097-1-24383-25939)
<220>
<221> VARIANT
<222> (1)...(142)
<223> Xaa = Any Amino Acid
<400> 2038
Tyr Ile Glu Met Asp Asn Tyr Phe Leu Thr Xaa Leu Xaa Arg Tyr Leu
1
                5
                                   10
Leu Phe Phe His Phe Ile Ile Ser Thr Gln Tyr Phe Gly Ile Lys Lys
                               25
           20
Phe Ile Leu Thr Ser Leu Leu Ala Tyr Cys Phe Trp Met Phe Ser Ile
Thr Lys Phe Leu Thr Tyr Gly Leu Lys Trp Leu Leu Ile Pro Asp Cys
                       55
                                           60
Xaa Ser Trp Tyr Gln His Ala Xaa Phe Asn Pro Xaa Gln Ile Leu Phe
                                       75
                 - 70
Leu Gln Asn Ser Xaa Ser Trp Leu Glu Val Tyr Phe Tyr Leu Phe Leu
                                   90
               85
Leu Phe Ala Val Pro Phe Asp Lys Ile Ile Phe Leu Ser Xaa Lys Met
           100
                               105
```

```
Tyr Leu Asn Lys Xaa Ile Ile Ser Val Leu Val Gly Thr Arg Trp Thr
                     120
Phe Gln Arg Cys Val His Thr Leu Cys Ile Leu Ser Leu Phe
                       135
<210> 2039
<211> 297
<212> PRT
<213> Homo sapien (3738097-1-94180-96164)
<220>
<221> VARIANT
<222> (1)...(297)
<223> Xaa = Any Amino Acid
<400> 2039
Met Lys Xaa Met Ala Val Glu Asn Asn Ser Ser Val Thr Glu Phe Ile
                         10
        5
Leu Val Arg Leu Thr Asn Ser Arg Cys Pro Ser Val Leu Phe Leu Met
                               25
           20
Trp Ser Leu Trp Gly Glu Phe Glu His Asn Phe Met Ser Leu Asn Ser
                           40
His Leu His Thr Pro Thr His Phe Phe Leu Phe Thr Leu Ser Phe Ile
                       55
Asp Val Cys Tyr Ser Phe Val Cys Thr Thr Lys Ile Pro Met Gly Phe
                   70
                                       75
Ile Ser Glu Arg Asn Ile Ile Ser Phe Val Gly Trp Pro Thr Xaa Leu
                                   90
Tyr Phe Phe Cys Ile Phe Val Lys Glu Pro Lys Asn Gly Val Ile Val
            100
                               105
Gly Ile Met Phe Ser Ala Lys Met Leu Val Cys Arg Glu Ile Met Asp
                           120
Xaa Ser Leu Met Xaa Asn Xaa Lys Met His Met Ala Leu Glu Arg Ser
                                           140
                       135
Asp Phe Arg Met Gly Xaa Thr Gly Ser Ala Thr Lys Lys His Leu Ile
                                      155
                  150
Ile Phe Leu Tyr Tyr Ser Asp Tyr Phe Gln Arg Xaa Xaa Gly Cys Arg
                                   170
                                                       175
Ala Leu Gly Gln Gly Ser Leu Ala Lys Gln Asp Thr Xaa Leu Xaa Asn
                                                   190
           180
                               185
Cys Thr Cys Thr Leu Lys Ser Leu Leu His Ile Ile Cys Phe Tyr
                           200
                                               205
Ile Trp Lys Gln Lys Lys Ile Ser Tyr Leu Tyr His Lys Ser Xaa Lys
                       215
                                           220
Met Asp Leu Tyr Lys Ile Cys His Val Leu Trp Val Thr His Lys Lys
                                       235
                   230
Asn Phe Leu Arg Pro Ser Ser Thr Ser Gln Met Val Gln Gly Lys Met
                245
                                   250
Leu Leu Lys Gly Tyr Ile Xaa Phe Trp Arg Met Ser Leu Pro Met Cys
            260
                               265
Ala Ile Phe Ile Phe Val Arg Arg Tyr Tyr Leu Leu Lys Lys Leu
                          280
Lys Thr Leu Leu Tyr Lys Asn Ser Tyr
    290
                       295
<210> 2040
<211> 325
<212> PRT
<213> Homo sapien (3746441-1-1-1386)
<220>
```

```
<222> (1)...(325)
<223> Xaa = Any Amino Acid
<400> 2040
Met Ala Asn Glu Asn Tyr Thr Lys Val Thr Xaa Phe Ile Phe Thr Gly
                                    10
Leu Asn Tyr Asn Pro Gln Leu Arg Val Phe Leu Phe Leu Leu Phe Leu
           20
                                25
Thr Thr Phe Tyr Val Ile Asn Val Thr Gly Asn Leu Gly Met Ile Val
                            40
Leu Ile Arg Ile Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu
                                            60
Ser His Leu Ser Phe Val Asp Thr Cys Phe Ser Ser Val Val Ser Pro
                    70
                                       75
Lys Met Leu Thr Asp Phe Phe Val Lys Arg Lys Ala Ile Ser Phe Leu
                                    90
               85
Gly Cys Ala Leu Gln Gln Trp Phe Phe Gly Phe Phe Val Ala Ala Asp
                                105
            100
                                                    110
Cys Phe Leu Leu Glu Ser Met Ala Tyr Asp Cys Tyr Val Ala Ile Cys
                            120
                                                125
Asn Pro Leu Leu Tyr Ser Val Ala Met Ser Gln Arg Leu Cys Ile Gln
                        135
                                            140
Leu Val Val Gly Pro Tyr Val Ile Gly Leu Met Asn Thr Met Thr His
                    150
                                        155
Thr Thr Asn Ala Phe Cys Leu Pro Phe Cys Gly Pro Asn Val Ile Asn
                                    170
                165
Pro Phe Phe Cys Asp Met Ser Pro Leu Leu Ser Leu Val Cys Ala Asp
                                185
            180
Thr Arg Leu Asn Lys Leu Ala Val Phe Ile Val Ala Gly Ala Val Gly
                            200
                                                205
Val Phe Ser Gly Leu Thr Ile Leu Ile Ser Tyr Ile Tyr Ile Leu Met
                                            220
                       215
Ala Ile Leu Arg Ile Arg Ser Ala Asp Gly Arg Cys Lys Thr Phe Ser
                   230
                                        235
Thr Cys Ser Ser His Leu Thr Ala Val Phe Ile Leu Tyr Gly Thr Leu
                                    250
                245
Phe Phe Ile Tyr Val His Pro Ser Ala Thr Phe Ser Leu Asp Leu Asn
            260
                                265
                                                    270
Lys Val Val Ser Val Phe Tyr Thr Ala Val Ile Pro Met Leu Asn Pro
                           280
                                                285
       275
Leu Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Asp Ala Ile His Arg
                       295
                                           300
Thr Val Thr Gln Arg Lys Phe Cys Lys Ala Xaa Ile Leu Ile Gln Lys
                  310
Glu Leu Gly Arg Lys
<210> 2041
<211> 328
<212> PRT
<213> Homo sapien (3766130-1-61888-64085)
<220>
<221> VARIANT
<222> (1)...(328)
<223> Xaa = Any Amino Acid
<400> 2041
Met Gly Gln Glu Asn Lys Asn Gln Thr Trp Val Ser Glu Phe Ile Leu
```

<221> VARIANT

```
Leu Gly Ile Ser Ser Asp Trp Gly Ile Gln Val Ser Leu Phe Ala Leu
                                25
Ile Leu Ala Met Tyr Leu Val Thr Ile Leu Gly Asn Thr Leu Ile Leu
                            40
Leu Leu Ile Arg Leu Asp Asn Arg Leu His Thr Pro Met Tyr Phe Ser
                        55
Leu Ser Val Leu Ser Phe Val Asp Phe Cys Tyr Thr Lys Ser Ile Val
                    70
                                        75
Pro Gln Met Leu Ser His Leu Leu Ser Ala Arg Lys Ser Ile Pro Phe
                                    90
Tyr Ser Cys Val Leu Gln Leu Tyr Val Ser Leu Ala Leu Cys Gly Ser
            100
                                105
Glu Phe Phe Leu Leu Gly Ala Met Ala Tyr Asp Arg Tyr Val Ala Val
                            120
                                                125
Cys His Pro Leu His Tyr Thr Val Ile Met His Gly Gly Leu Cys Leu
                        135
                                            140
Gly Leu Ala Ala Ser Arg Leu Val Ala Gly Phe Ser Asn Ser Leu Met
                    150
                                        155
Glu Thr Ile Ile Thr Phe Gln Leu Pro Val Ser Arg Phe Ile Asn His
                165
                                    170
Phe Val Cys Glu Thr Leu Ala Val Leu Gln Leu Ala Cys Val Asp Val
           180
                                185
Pro Phe Asn Lys Val Met Val Ala Ile Ser Gly Phe Leu Val Ile Leu
                           200
                                                205
Leu Pro Cys Ser Leu Val Leu Phe Ser Tyr Ala Cys Ile Val Ala Thr
                        215
                                            220
Ile Leu Cys Ile Arg Ser Thr Gln Val Arg Cys Lys Ala Phe Gly Thr
                    230
                                        235
Cys Ala Ser His Leu Ile Val Val Cys Met Cys Phe Gly Ala Thr Ile
                245
                                    250
Cys Thr Tyr Leu Gly Pro Gln Leu Ala Ser Ser Ala Glu Glu Lys
                                265
Met Ile Ala Leu Phe Tyr Gly Val Val Ser Pro Met Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Thr Ala Ala Val Arg Lys Val
                        295
                                            300
Leu Glu Arg Cys Arg Xaa Arg Val Lys Thr Leu Arg Thr Ser Cys Tyr
                   310
                                        315
Leu Ser Ser Lys Pro Lys Arg Arg
```

<210> 2042

<211> 311

<212> PRT

<213> Homo sapien (3766130-1-85703-88675)

<400> 2042

 Met
 Glu
 Leu
 Glu
 Asn
 Gln
 Thr
 Arg
 Val
 Thr
 Lys
 Phe
 Ile
 Leu
 Val
 Gly

 Phe
 Pro
 Gly
 Ser
 Leu
 Ser
 Met
 Arg
 Ala
 Ala
 Met
 Phe
 Leu
 Ile
 Phe
 Leu
 Leu
 Arg
 Ala
 Glu
 Asn
 Val
 Ile
 Ile
 Ile
 Leu
 Leu
 Ile
 Ile
 Leu
 Leu
 Ile
 Ile
 Leu
 Ile
 Ile

```
Val Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Arg
                            120
Pro Leu His Tyr Pro Thr Ile Met Ser His Gly Leu Cys Phe Arg Leu
                       135
Ala Leu Gly Ser Trp Ala Ile Gly Phe Gly Ile Ser Leu Ala Lys Ile
                                       155
                   150
Tyr Phe Ile Ser Cys Leu Ser Phe Cys Gly Pro Asn Val Ile Asn His
               165
                                   170
Phe Phe Cys Asp Ile Ser Pro Val Leu Asn Leu Ser Cys Thr Asp Met
                               185
                                                    190
            180
Ser Ile Thr Glu Leu Val Asp Phe Ile Leu Ala Leu Val Ile Phe Leu
                           200
                                                205
Phe Pro Leu Phe Ile Thr Val Leu Ser Tyr Gly Cys Ile Leu Ala Thr
                                           220
                       215
Ile Leu Cys Met Pro Thr Gly Lys Gln Lys Ala Phe Ser Thr Cys Ala
                   230
                                        235
Ser His Leu Val Val Val Thr Ile Phe Tyr Ser Ala Ile Ile Phe Met
                                    250
               245
Tyr Ala Arg Pro Arg Val Ile His Ala Phe Asn Met Asn Lys Ile Ile
                                265
                                                   270
Ser Ile Phe Tyr Ala Ile Val Thr Pro Ser Leu Asn Pro Phe Ile Tyr
                           280
                                               285
       275
Cys Leu Arg Asn Arg Glu Val Lys Glu Ala Leu Lys Lys Leu Ala Tyr
                       295
Cys Gln Ala Ser Arg Ser Asp
<210> 2043
<211> 216
<212> PRT
<213> Homo sapien (3831602-1-1-649)
Phe Val Asp Val Cys Asn Ser Thr Thr Ile Thr Pro Lys Met Leu Ala
                                    10
Asp Leu Leu Ser Glu Lys Lys Thr Ile Ser Phe Ala Gly Cys Phe Leu
                               25
          20
Gln Met Tyr Phe Phe Ile Ser Leu Ala Thr Thr Glu Cys Ile Leu Phe
                           40
Gly Leu Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys Arg Pro Leu Leu
                       55
                                           60
Tyr Ser Leu Ile Met Ser Arg Thr Val Tyr Leu Lys Met Ala Ala Gly
                   70
                                       75
Ala Phe Ala Ala Gly Leu Leu Asn Phe Met Val Asn Thr Ser His Val
                                   90
               85
Ser Ser Leu Ser Phe Cys Asp Ser Asn Val Ile His His Phe Phe Cys
           100
                               105
Asp Ser Pro Pro Leu Phe Lys Leu Ser Cys Ser Asp Thr Ile Leu Lys
                           120
                                                125
Glu Ser Ile Ser Ser Ile Leu Ala Gly Val Asn Ile Val Gly Thr Leu
                       135
                                           140
Leu Val Ile Leu Ser Ser Tyr Ser Tyr Val Leu Phe Ser Ile Phe Ser
                  150
                                       155
Met His Ser Gly Glu Gly Arg His Arg Ala Phe Ser Thr Cys Ala Ser
                                   170
               165
```

His Leu Thr Ala Ile Ile Leu Phe Tyr Ala Thr Cys Ile Tyr Thr Tyr
180 185 190

Leu Arg Pro Ser Ser Ser Tyr Ser Leu Asn Gln Asp Lys Val Ala Ser
195 200 205

Val Phe Tyr Thr Val Val Ile Pro

```
<210> 2044
 <211> 217
 <212> PRT
 <213> Homo sapien (3831605-1-1-652)
 <220>
 <221> VARIANT
 <222> (1)...(217)
 <223> Xaa = Any Amino Acid
<400> 2044
Leu Pro Asp Ile Gly Phe Thr Ser Ala Thr Val Pro Lys Met Ile Glu
                                     10
Glu Met Gln Ser His Ser Arg Val Ile Tyr His Gly Asp Cys Leu Thr
             20
                                 25
Gln Met Ser Phe Phe Val Leu Phe Ala Cys Lys Asp Asp Met Ile Leu
                             40
Thr Val Met Ala Tyr Asp Trp Phe Val Ala Ile Cys His Pro Leu Asn
Tyr Pro Gly Ile Met Asn Pro His Leu Cys Val Leu Leu Val Leu Val
                    70
Pro Phe Phe Leu Ser Leu Leu Asp Ser Gln Leu His Asn Leu Ile Val
                85
                                     90
Leu Gln Phe Ile Cys Phe Lys Asn Val Glu Ile Ser Asn Phe Phe Cys
                                105
Asp Pro Phe Gln Arg Leu Asn Leu Ala Cys Ser Asp Ser Asp Ile Asn
                            120
                                                125
Asn Ile Tyr Ile Tyr Leu Asp Ser Thr Ile Phe Gly Phe Leu Arg Ile
                        135
                                            140
Ser Gly Ile Leu Leu Cys Tyr Tyr Thr Val Val Phe Pro Ile Leu Arg
                   150
                                        155
Ile Pro Ser Ser Asp Gly Asn Tyr Lys Ala Phe Ser Thr Xaa Gly Ser
                165
                                    170
Arg Leu Ala Val Val Cys Leu Phe Tyr Gly Thr Gly Ile Gly Val Tyr
                                185
                                                     190
Leu Thr Ser Ala Val Ser Ser Ser Pro Arg Asn Asp Val Val Ala Ser
                            200
Val Met Tyr Ala Val Val Val Thr Pro
<210> 2045
<211> 214
<212> PRT
<213> Homo sapien (3831606-1-1-644)
<400> 2045
Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys Met Leu Val
                                    10
Asn Leu Gln Ser Gln Asn Lys Ala Ile Ser Tyr Thr Gly Cys Leu Thr
Gln Leu Tyr Phe Leu Val Ser Leu Val Ala Leu Asp Asn Leu Asn Leu
Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Arg Pro Leu His
Tyr Val Thr Ala Met Ile Pro Gly Leu Cys Ile Leu Leu Leu Ser Leu
Cys Trp Val Phe Ser Ala Leu Tyr Gly Leu Ile His Ile Leu Leu Met
               85
                                    90
Thr Arg Val Thr Phe Cys Gly Ser Gln Lys Ile His Tyr Leu Phe Cys
                                105
```

```
Glu Met Tyr Phe Leu Leu Arg Leu Ala Cys Ser Asn Ile His Val Asn
                           120
        115
His Thr Val Leu Val Ala Thr Gly Cys Phe Ile Phe Leu Ile Pro Leu
                       135
Gly Phe Met Ile Thr Ser Asn Ala Arg Ile Val Arg Ala Ile Leu Gln
                   150
                                       155
Ile Pro Ser Ala Thr Gly Lys Tyr Lys Ala Phe Ser Thr Cys Ala Ser
                                  170
               165
His Leu Ala Val Val Ser Leu Phe Tyr Gly Thr Leu Gly Met Val Tyr
                              185
           180
Leu Gln Pro Leu Gln Thr Tyr Ser Met Lys Asp Ser Val Ala Thr Val
                           200
                                               205
       195
Met His Ala Val Val Thr
   210
<210> 2046
<211> 278
<212> PRT
<213> Homo sapien (3831610-1-1-984)
<400> 2046
Met Ala Ile Arg Asn His Ser Thr Leu His Lys Pro Met Tyr Phe Phe
                5
                                   10
Leu Ala Asn Met Ser Phe Leu Glu Ile Trp Tyr Val Thr Val Thr Ile
                               25
Pro Lys Met Leu Ala Gly Phe Val Gly Ser Lys Gln Asp His Gly Gln
                           40
Leu Ile Ser Phe Glu Gly Cys Met Thr Gln Leu Tyr Phe Phe Leu Gly
                       55
Leu Gly Cys Thr Glu Cys Val Leu Leu Ala Val Met Ala Asn Asp Arg
                   70
                                       75
Tyr Met Ala Ile Cys Tyr Leu Leu His Asn Pro Val Ile Val Ser Gly
                                   90
               85
Arg Leu Cys Val Gln Met Ala Ala Gly Ser Trp Ala Gly Gly Phe Gly
           100
                               105
Ile Ser Met Val Lys Val Phe Leu Ile Ser Gly Leu Ser Asn Gly Gly
                                               125
       115
                           120
Pro Asn Ile Ile Asn His Phe Phe Cys Asp Val Ser Pro Leu Leu Asn
                                           140
                       135
Leu Ser Cys Thr Asp Met Ser Thr Ala Glu Leu Thr Asp Phe Ile Leu
                  150
                                       155
Ala Ile Phe Ile Leu Leu Gly Pro Leu Ser Val Thr Gly Ala Ser Tyr
                                  170
               165
Val Ala Ile Thr Gly Ala Val Met His Ile Pro Ser Ala Ala Gly Arg
                                                   190
                               185
           180
Tyr Lys Ala Phe Ser Thr Cys Ala Ser His Phe Asn Val Val Ile Ile
                           200
                                               205
Phe Tyr Ala Ala Ser Ile Phe Ile Tyr Ala Arg Pro Lys Ala Leu Ser
                       215
                                           220
   210
Ala Phe Asp Thr Asn Lys Leu Val Ser Val Leu Tyr Ala Val Ile Val
                                       235
                   230
Pro Leu Leu Asn Pro Ile Ile Tyr Cys Leu Arg Asn Gln Glu Val Lys
                                   250
Arg Ala Leu Cys Cys Ile Leu His Leu Tyr Gln His Gln Asp Pro Asp
                               265
           260
Pro Lys Lys Gly Ser Arg
       275
<210> 2047
<211> 227
<212> PRT
```

<213> Homo sapien (3831615-1-1-684)

<400> 2047 Ser Phe Leu Glu Ile Gly Phe Asn Leu Val Ile Val Pro Lys Met Leu 10 Gly Thr Leu Leu Ala Gln Asp Thr Thr Ile Ser Phe Leu Gly Cys Ala 25 Thr Gln Met Tyr Phe Phe Phe Phe Gly Val Ala Glu Cys Phe Leu 40 Leu Ala Thr Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Ser Pro Leu 55 His Tyr Pro Val Ile Met Asn Gln Arg Thr Arg Ala Lys Leu Ala Ala 70 75 Ala Ser Trp Phe Pro Gly Phe Pro Val Ala Thr Val Gln Thr Thr Trp 85 90 Leu Phe Ser Phe Pro Phe Cys Gly Thr Asn Lys Val Asn His Phe Phe 100 105 Cys Asp Ser Pro Pro Val Leu Lys Leu Val Cys Ala Asp Thr Ala Leu 120 125 Phe Glu Ile Tyr Ala Ile Val Gly Thr Ile Leu Val Val Met Ile Pro 135 Cys Leu Leu Ile Leu Cys Ser Tyr Thr Arg Ile Ala Ala Ala Ile Leu 150 155 Lys Ile Pro Ser Ala Lys Gly Lys His Lys Ala Phe Ser Thr Cys Ser 165 170 Ser His Leu Leu Val Val Ser Leu Phe Tyr Ile Ser Leu Ser Leu Thr 180 185 Tyr Phe Arg Pro Lys Ser Asn Asn Ser Pro Glu Gly Lys Lys Leu Leu 200 Ser Leu Ser Tyr Thr Val Met Thr Pro Met Leu Asn Pro Phe His Leu 215 Leu Ser Trp 225 <210> 2048 <211> 217

<212> PRT

<213> Homo sapien (3831618-1-1-653)

<400> 2048

Ser Leu Ala Asp Leu Cys Phe Ser Thr Asn Ile Val Pro Gln Ala Leu 10 Val His Leu Leu Ser Arg Lys Lys Val Ile Ala Phe Thr Leu Cys Ala 25 Ala Arg Leu Leu Phe Phe Leu Ile Phe Gly Cys Thr Gln Cys Ala Leu 40 Leu Ala Val Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu 55 60 Arg Tyr Pro Asp Ile Met Thr Trp Lys Val Cys Val Gln Leu Ala Thr 70 75 Gly Ser Trp Thr Ser Gly Ile Leu Val Ser Val Val Asp Thr Thr Phe 85 90 Thr Leu Arg Leu Pro Tyr Arg Gly Ser Asn Ser Ile Ala His Phe Phe 100 105 110 Cys Glu Ala Pro Ala Leu Leu Ile Leu Ala Ser Thr Asp Thr His Ala 120 125 Ser Glu Met Ala Ile Phe Leu Thr Gly Val Val Ile Leu Leu Ile Pro 135 140 Val Phe Leu Ile Leu Val Ser Tyr Gly Arg Ile Ile Val Thr Val Val 155 Lys Met Lys Ser Thr Val Gly Ser Leu Lys Ala Phe Ser Thr Cys Gly

```
165
                                    170
 Ser His Leu Met Val Val Ile Leu Phe Tyr Gly Ser Ala Ile Ile Thr
                         185
           180
 Tyr Met Thr Pro Lys Ser Ser Lys Gln Glu Lys Ser Val Ser Val
                        200
 Phe Tyr Ala Ile Val Thr Pro Met Leu
                        215
<210> 2049
<211> 279
 <212> PRT
 <213> Homo sapien (3834584-1-78858-80128)
<400> 2049
Met Tyr Leu Ala Thr Val Leu Gly Asn Leu Leu Ile Ile Leu Ala Ile
                                    10
Ser Ile Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser Asn
Met Ser Phe Val Asp Asn Cys Phe Ser Thr Thr Val Pro Lys Met Leu
                           40
Ala Asn His Ile Leu Arg Thr Gln Thr Ile Ser Phe Ser Gly Cys Leu
                        55
Met Gln Met Tyr Phe Ile Ser Glu Leu Ala Asp Met Asp Asn Phe Leu
                   70
                                       75
Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala Val Cys Arg Pro Leu
                85
                                    90
His Tyr Thr Ala Lys Met Thr His Gln Leu Cys Ala Leu Leu Val Thr
                                105
Gly Ser Trp Val Val Ala Asn Ser Ser Ala Leu Leu His Thr Leu Leu
        115
                            120
Met Ala Arg Leu Ser Phe Cys Ala Asp Asn Thr Ile Pro His Ile Phe
                       135
                                            140
Cys Asp Val Thr Pro Leu Leu Lys Leu Ser Cys Ser Asp Thr His Leu
                   150
                                       155
Ser Glu Val Met Ile Leu Thr Glu Ala Ala Leu Val Thr Ile Thr Pro
                                   170
Phe Leu Cys Leu Leu Ala Ser Tyr Met His Ile Thr Cys Val Val Leu
           180
                               185
Arg Val Pro Ser Thr Lys Gly Arg Trp Lys Ala Phe Ser Thr Cys Gly
                           200
                                               205
Ser His Leu Ala Val Val Leu Leu Phe Tyr Gly Thr Ile Met Ser Pro
                       215
                                            220
Tyr Phe Arg Thr Ser Ser Ser His Ser Ala Gln Arg Asp Ile Ala Ala
                    230
                                       235
Ala Val Arg Phe Thr Val Val Thr Pro Val Met Asn Pro Leu Ile Tyr
               245
                                   250
                                                      255
Ser Leu Arg Asn Lys Asp Ile Lys Gly Ala Leu Val Lys Val Val Ala
           260
                               265
Val Lys Phe Phe Ser Val Gln
        275
<210> 2050
<211> 310
<212> PRT
<213> Homo sapien (3924656-1-75882-77814)
<400> 2050
Met Glu Pro Gln Asn Thr Thr Gln Val Ser Met Phe Val Leu Leu Gly
                                   10
Phe Ser Gln Thr Gln Glu Leu Gln Lys Phe Leu Phe Leu Phe Leu
           20
                               25
```

```
Leu Val Tyr Val Thr Thr Ile Val Gly Asn Leu Leu Ile Met Val Thr
                            40
Val Thr Phe Asp Cys Arg Leu His Thr Pro Met Tyr Phe Leu Leu Arg
Asn Leu Ala Leu Ile Asp Leu Cys Tyr Ser Thr Val Thr Ser Pro Lys
Met Leu Val Asp Phe Leu His Glu Thr Lys Thr Ile Ser Tyr Gln Gly
                                     90
Cys Met Ala Gln Ile Phe Phe Phe His Leu Leu Gly Gly Thr Val
                                105
Phe Phe Leu Ser Val Met Ala Tyr Asp Arg Tyr Ile Ala Ile Ser Gln
                            120
Pro Leu Arg Tyr Val Thr Ile Met Asn Thr Gln Leu Cys Val Gly Leu
                        135
Val Val Ala Ala Trp Val Gly Gly Phe Val His Ser Ile Val Gln Leu
                    150
                                        155
Ala Leu Ile Leu Pro Leu Pro Phe Cys Gly Pro Asn Ile Leu Asp Asn
                                    170
Phe Tyr Cys Asp Val Pro Gln Val Leu Arg Leu Ala Cys Thr Asp Thr
                                185
Ser Leu Leu Glu Phe Leu Met Ile Ser Asn Ser Gly Leu Leu Val Ile
                            200
Ile Trp Phe Leu Leu Leu Ile Ser Tyr Thr Val Ile Leu Val Met
                       215
                                            220
Leu Arg Ser His Ser Gly Lys Ala Arg Arg Lys Ala Ala Ser Thr Cys
                    230
                                        235
Thr Thr His Ile Ile Val Val Ser Met Ile Phe Ile Pro Cys Ile Tyr
                245
                                    250
Ile Tyr Thr Trp Pro Phe Thr Pro Phe Leu Met Asp Lys Ala Val Ser
            260
                                265
Ile Ser Tyr Thr Val Met Thr Pro Met Leu Asn Pro Met Ile Tyr Thr
        275
                            280
Leu Arg Asn Gln Asp Met Lys Ala Ala Met Arg Arg Leu Gly Lys Cys
                        295
Leu Val Ile Cys Arg Glu
<210> 2051
<211> 123
<212> PRT
<213> Homo sapien (3962498-1-83664-84695)
<400> 2051
Met Ser Gly Ser Pro Thr Gln Leu Thr Ala Gly Pro Arg Thr Ala Ser
                                    10
Gly Cys Val Ile Met Ile Cys Phe Ala Leu Thr Val Leu Ser Tyr Ile
            20
                                25
Arg Ile Leu Ala Thr Val Val Gln Ile Arg Ser Ala Ala Ser Arg Arg
                            40
Lys Ala Phe Ser Thr Cys Ser Ser His Leu Gly Met Val Leu Leu Phe
                        55
                                            60
Tyr Gly Thr Gly Ser Ser Thr Tyr Met Arg Pro Thr Thr Arg Tyr Ser
                                        75
Pro Leu Glu Gly Arg Leu Ala Ala Val Phe Tyr Ser Ile Leu Ile Pro
                                    90
Thr Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Gln Asp Met Lys Arg
            100
                                105
Ala Leu Trp Lys Leu Tyr Leu Gln Val Pro Tyr
                            120
```

<210> 2052

. .

```
<211> 343
<212> PRT
<213> Homo sapien (3970959-1-83329-85626)
<220>
<221> VARIANT
<222> (1)...(343)
<223> Xaa = Any Amino Acid
<400> 2052
Met Val Asn Gln Ser Ser Ala Pro Gly Phe Leu Leu Gly Phe Ser
                                   10
Glu His Pro Ala Leu Glu Arg Thr Leu Phe Val Val Phe Thr Ser
           20
                              25
Tyr Leu Leu Thr Leu Gly Gly Leu Ile Ile Leu Leu Ser Val Leu Asp
                          40
Pro Arg Leu His Ser Pro Met Tyr Phe Phe Leu Ser Asn Leu Ser Phe
                       55
                                          60
Leu Asp Leu Cys Phe Thr Ile Ser Cys Val Pro Gly Met Leu Val Asn
                                      75
              70
Leu Trp Glu Pro Lys Lys Thr Ile Ile Leu Leu Gly Cys Ser Val Gln
           · 85
                                   90
Phe Phe Ile Phe Leu Ser Leu Gly Thr Thr Glu Cys Ile Leu Leu Thr
                               105
Val Met Ala Phe Asp Arg Tyr Met Ala Ile Phe Lys Pro Leu Arg His
                                              125
                           120
Ala Thr Ile Val His Leu Cys Leu Cys Trp Gln Leu Ala Ser Val Ala
                       135
Trp Val Ile Gly Leu Val Glu Ser Val Val Gln Thr Pro Ser Thr Leu
                   150
                                      155
Arg Leu Pro Phe Cys Pro His Gln Gln Val Asp Asp Phe Val Cys Glu
                                 170
              165
Val Pro Ala Leu Ile Arg Leu Ser Cys Glu Asp Thr Ser Tyr Asn Glu
                                                  190
           180
                               185
Ile Gln Met Ala Val Ala Ser Val Phe Ile Leu Ala Val Pro Ser Leu
                                              205
  195
                           200
Ile Leu Val Ser Tyr Gly Ala Ile Ala Trp Ala Val Leu Arg Ile Thr
                                          220
                       215
Ala Lys Gly Gln Arg Lys Ala Phe Gly Thr Cys Ser Ser His Leu Thr
                  230
                                      235
Val Val Thr Leu Phe Tyr Ser Ser Val Ile Ala Val Tyr Leu Gln Pro
                                  250
               245
Lys Asn Pro Tyr Ala Gln Glu Arg Gly Lys Phe Phe Gly Leu Phe Tyr
                                                   270
                               265
          260
Ala Val Gly Thr Pro Ser Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn
                           280
Lys Glu Val Thr Arg Ala Phe Arg Arg Leu Leu Ala Lys Glu Met Gly
                                           300
                       295
Leu Ile Gln Ser Xaa Gly Arg Ala Val Xaa Cys Ala Phe Xaa Ile Lys
                                      315
                   310
Lys Lys Leu Phe Ile Leu Leu Xaa Thr Ser Leu Ser Ser Gln Val Tyr
              325
                                  330
Tyr Leu Ser Tyr Thr His His
           340
<210> 2053
<211> 312
<212> PRT
<213> Homo sapien (3982606-1-1-939)
<400> 2053
```

```
Met Asp Gly Val Asn Asp Ser Ser Leu Gln Gly Phe Val Leu Met Ser
                                   10
Ile Ser Asp His Pro Gln Leu Glu Met Ile Phe Phe Ile Ala Ile Leu
           20
                               25
Phe Ser Tyr Leu Leu Thr Leu Leu Gly Asn Ser Thr Ile Ile Leu Leu
                           40
Ser Arg Leu Glu Ala Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                        55
Asn Leu Ser Ser Leu Asp Leu Ala Phe Ala Thr Ser Ser Val Pro Gln
Met Leu Ile Asn Leu Trp Gly Pro Gly Lys Thr Ile Ser Tyr Gly Gly
                                   90
Cys Ile Thr Gln Leu Tyr Val Phe Leu Trp Leu Gly Ala Thr Glu Cys
                               105
Ile Leu Leu Val Val Met Ala Phe Asp Arg Tyr Val Ala Val Cys Arg
                                               125
                           120
Pro Leu Arg Tyr Thr Ala Ile Met Asn Pro Gln Leu Cys Trp Leu Leu
                                           140
                       135
Ala Val Ile Ala Trp Leu Gly Gly Leu Gly Asn Ser Val Ile Gln Ser
                                        155
                   150
Thr Phe Thr Leu Gln Leu Pro Leu Cys Gly His Arg Arg Val Glu Gly
                                    170
               165
Phe Leu Cys Glu Val Pro Ala Met Ile Lys Leu Ala Cys Gly Asp Thr
                                                    190
                                185
          180
Ser Leu Asn Gln Ala Val Leu Asn Gly Val Cys Thr Phe Phe Thr Ala
                                                205
                            200
Val Pro Leu Ser Ile Ile Val Ile Ser Tyr Cys Leu Ile Ala Gln Ala
                        215
                                            220
Val Leu Lys Ile His Ser Ala Glu Gly Arg Arg Lys Ala Phe Asn Thr
                                        235
                    230
Cys Leu Ser His Leu Leu Val Val Phe Leu Phe Tyr Gly Ser Ala Ser
                                    250
                245
Tyr Gly Tyr Leu Leu Pro Ala Lys Asn Ser Lys Gln Asp Gln Gly Lys
                               265
            260
Phe Ile Ser Leu Phe Tyr Ser Leu Val Thr Pro Met Val Asn Pro Leu
                            280
                                               285
Ile Tyr Thr Leu Arg Asn Met Glu Val Lys Gly Ala Leu Arg Arg Leu
                       295
Leu Gly Lys Gly Arg Glu Val Gly
                    310
<210> 2054
<211> 104
<212> PRT
<213> Homo sapien (3983513-1-17888-18909)
<220>
<221> VARIANT
<222> (1)...(104)
<223> Xaa = Any Amino Acid
<400> 2054
Val Pro Val Arg Cys Pro Gly Arg Val Arg Thr Leu Val Pro Glu Ile
Ile Ser Val Asp Phe Pro Xaa Xaa Thr Leu Ile Xaa Gln Glu Val Tyr
            20
                                25
Gly Leu Leu Ser Thr Phe Pro Leu Phe Ala Gln Gly Val Cys Gly Pro
Lys Ile Ile Ser Lys Ala Phe Cys Phe Ser Leu Leu Lys Gly Gly Cys
                        55
Ser His Ser Leu Gln Leu Ala Lys Gly Gly Gly Val Leu Arg Lys Ala
```

```
70
 Gly Thr Leu Gly Met Leu Lys Val Ala Ser Val Cys Cys Ala Tyr His
                85
                                     90
 Leu Leu Val Leu Leu Ser Pro
            100
 <210> 2055
 <211> 210
 <212> PRT
 <213> Homo sapien (4156137-1-118865-120877)
<220>
 <221> VARIANT
 <222> (1)...(210)
 <223> Xaa = Any Amino Acid
<400> 2055
Ser Val Lys Tyr Leu Asn Glu Ser Phe Pro Glu Asp Phe Ile Leu Met
 1
                                    10
                5
Gly Phe Val Lys Tyr Pro Trp Leu Asp Phe Leu Leu Phe Cys Val Leu
            20
                                25
                                                    30
Leu Thr Phe Tyr Met Phe Thr Leu Leu Gly Asn Ser Ala Ile Ile Leu
Val Ser Gln Leu Asp Ser Gln Leu His Ser Pro Met Tyr Phe Leu Leu
                        55
Thr Ser Leu Ser Val Leu Tyr Leu Cys Phe Thr Thr Thr Val Pro
                    70
                                        75
Gln Met Leu Phe Asn Leu Gly Gly Thr Asn Lys Asn Ile Thr Xaa Ile
                                    90
Gly Cys Met Ala Gln Ala Tyr Val Phe His Trp Leu Ala Cys Thr Glu
            100
                                105
Cys Val Leu Leu Gly Ile Val Ala Leu Asp Cys Tyr Val Ala Val Cys
                            120
                                                125
Lys Pro Pro Arg Tyr Thr Ile Ile Ile Asp His Lys Val Tyr Leu His
                        135
                                            140
Leu Ser Ser Thr Ala Trp Leu Ile Gly Leu Ala Asn Ser Leu Leu Gln
                    150
                                        155
Ser Thr Ile Thr Ile Gln Leu Pro Leu Xaa Arg Cys Ile Ala Gln Ile
                165
                                    170
Phe Leu Xaa Leu Glu Ser Val Thr Xaa Gln Ser Leu Thr Val Thr Tyr
           180
                                185
Leu Xaa Asp Leu Leu Gln His Ser Ile Xaa Gly Gln Leu His Ala Gly
                            200
Glu Leu
    210
<210> 2056
<211> 310
<212> PRT
<213> Homo sapien (4156187-1-109107-111440)
Met Gly Asp Asn Ile Thr Ser Ile Thr Glu Phe Leu Leu Gly Phe
Pro Val Gly Pro Arg Ile Gln Met Leu Leu Phe Gly Leu Phe Ser Leu
           20
Phe Tyr Val Phe Thr Leu Leu Gly Asn Gly Thr Ile Leu Gly Leu Ile
                            40
Ser Leu Asp Ser Arg Leu His Ala Pro Met Tyr Phe Phe Leu Ser His
Leu Ala Val Val Asp Ile Ala Tyr Ala Cys Asn Thr Val Pro Arg Met
```

```
70
Leu Val Asn Leu Leu His Pro Ala Lys Pro Ile Ser Phe Ala Gly Arg
                85
                                    90
Met Met Gln Thr Phe Leu Phe Ser Thr Phe Ala Val Thr Glu Cys Leu
                                105
            100
Leu Leu Val Val Met Ser Tyr Asp Leu Tyr Val Ala Ile Cys His Pro
        115
                           120
Leu Arg Tyr Leu Ala Ile Met Thr Trp Arg Val Cys Ile Thr Leu Ala
                       135
                                            140
Val Thr Ser Trp Thr Thr Gly Val Leu Leu Ser Leu Ile His Leu Val
                    150
                                        155
Leu Leu Pro Leu Pro Phe Cys Arg Pro Gln Lys Ile Tyr His Phe
                165
                                   170
Phe Cys Glu Ile Leu Ala Val Leu Lys Leu Ala Cys Ala Asp Thr His
                                185
Ile Asn Glu Asn Met Val Leu Ala Gly Ala Ile Ser Gly Leu Val Gly
                            200
Pro Leu Ser Thr Ile Val Val Ser Tyr Met Cys Ile Leu Cys Ala Ile
                       215
                                           220
Leu Gln Ile Gln Ser Arg Glu Val Gln Arg Lys Ala Phe Cys Thr Cys
                   230
                                        235
Phe Ser His Leu Cys Val Ile Gly Leu Phe Tyr Gly Thr Ala Ile Ile
                                   . 250
                245
Met Tyr Val Gly Pro Arg Tyr Gly Asn Pro Lys Glu Gln Lys Lys Tyr
                                265
Leu Leu Phe His Ser Leu Phe Asn Pro Met Leu Asn Pro Leu Ile
                            280
Cys Ser Leu Arg Asn Ser Glu Val Lys Asn Thr Leu Lys Arg Val Leu
Gly Val Glu Arg Ala Leu
<210> 2057
<211> 127
<212> PRT
<213> Homo sapien (4156187-1-27673-28734)
<220>
<221> VARIANT
<222> (1)...(127)
<223> Xaa = Any Amino Acid
<400> 2057
Met Gly Gly Lys Gln Pro Trp Val Thr Glu Phe Ile Leu Val Gly Phe
                                   10
Gln Leu-Cys Ala Glu Met Glu Ile Phe Leu Ser Cys Ile Phe Ser Arg
                                25
Phe Tyr Ala Phe Ser Leu Leu Arg Asn Gly Met Asn Met Gly Leu Thr
                            40
Tyr Leu Asp Asp Arg Asp Asp Leu His Thr Leu Ile Tyr Ile Phe
                        55
Leu Ser His Leu Ala Ile Asn Asp Met Tyr Tyr Ala Ser Asn Asn Val
                    70
Pro Lys Arg Gln Val Asn Gln Met Asn Gln Lys Lys Lys Tyr Phe Val
                                   90
Leu Trp Ile Lys Gln Ile Phe Leu Tyr Leu Ala Phe Ala His Thr Glu
           100
                               105
Cys Leu Ile Xaa Ala Met Met Ser Cys Asn Arg Tyr Val Ala Ile
                       . 120
```

<210> 2058

```
<211> 312
 <212> PRT
 <213> Homo sapien (4156187-1-8673-10070)
 <221> VARIANT
 <222> (1)...(312)
 <223> Xaa = Any Amino Acid
 <400> 2058
 Met Gly Asp Asn Gln Ser Arg Val Thr Glu Phe Ile Leu Val Gly Phe
         5
                            10
 Gln Leu Ser Val Glu Met Glu Val Leu Leu Phe Trp Ile Phe Ser Leu
                                25
 Leu Tyr Leu Phe Ser Leu Leu Ala Asn Gly Met Ile Leu Gly Leu Ile
                            40
                                                45
 Cys Leu Asp Pro Arg Leu Arg Thr Pro Met Tyr Phe Phe Leu Ser His
 Leu Ala Val Ile Asp Ile Tyr Tyr Ala Ser Ser Asn Leu Leu Asn Met
                    70
                                        75
 Leu Glu Asn Leu Val Lys His Lys Lys Asn Tyr Pro Phe Ile Ser Cys
                                    90
 Ile Met Gln Met Ala Leu Tyr Leu Thr Phe Ala Ala Ala Val Cys Met
                                105
 Ile Leu Val Val Met Ser Tyr Asp Arg Phe Val Ala Ile Cys His Pro
                            120
                                                125
 Leu His Tyr Thr Val Ile Met Asn Trp Arg Val Cys Thr Val Leu Ala
                        135
                                            140
 Ile Thr Ser Trp Ala Cys Gly Phe Ser Leu Ala Leu Ile Asn Leu Ile
                   150
                                        155
Leu Leu Arg Leu Pro Phe Cys Gly Pro Gln Glu Val Asn His Phe
               165
                                    170
Phe Gly Glu Ile Leu Ser Val Leu Lys Leu Ala Cys Ala Asp Thr Trp
           180
                                185
                                                   190
Ile Asn Glu Ile Phe Val Phe Ala Gly Gly Val Phe Val Leu Val Gly
       195
                            200
Pro Leu Ser Leu Met Leu Ile Ser Tyr Met Arg Ile Leu Leu Ala Ile
                       215
                                            220
Leu Lys Ile Gln Ser Lys Glu Gly Arg Lys Lys Ala Phe Ser Thr Cys
                   230
                                       235
Ser Ser His Leu Cys Val Val Gly Leu Tyr Phe Gly Met Ala Met Val
               245
                                   250
Val Tyr Leu Val Pro Asp Asn Ser Gln Arg Gln Lys Gln Gln Lys Ile
           260
                               265
Leu Thr Leu Phe Tyr Ser Leu Phe Asn Pro Leu Leu Asn Pro Leu Ile
                           280
                                               285
Tyr Ser Leu Arg Asn Ala Gln Val Lys Gly Ala Leu Tyr Arg Ala Leu
                       295
Gln Lys Lys Arg Thr Met Xaa Met
                   310
<210> 2059
<211> 315
<212> PRT
<213> Homo sapien (4160227-1-768-2100)
<220>
<221> VARIANT
<222> (1) ... (315)
<223> Xaa = Any Amino Acid
```

```
<400> 2059
Met Pro Leu Thr Asn Glu Ser His Pro Glu Glu Phe Ile Leu Leu Gly
                                    10
Phe Ala Asp Arg Pro Trp Leu Glu Leu Pro Leu Phe Thr Ser Leu Leu
                                25
Ile Met Tyr Pro Ile Ala Val Met Gly Asn Ile Thr Ile Ile Leu Met
                            40
Ser Arg Leu Asp Ser Arg Leu His Ser Pro Met Tyr Phe Phe Leu Thr
Asn Leu Ser Phe Leu Asp Met Cys Tyr Thr Thr Ser Ile Val Pro Gln
                   70
                                        75
Met Leu Phe Asn Leu Gly Ser Ser Lys Lys Thr Ile Ser Tyr Met Gly
               85
                                   90
Cys Ala Val Gln Leu Tyr Phe Phe His Ile Met Gly Gly Thr Glu Cys
           100
                               105
Leu Leu Leu Ala Ile Met Ser Phe Asp Arg Tyr Val Ala Ile Cys Arg
        115
                            120
                                                125
Pro Leu His Tyr Thr Leu Ile Met Asn Gln Arg Val Cys Ile His Xaa
                                            140
                       135
Phe Pro Pro Cys Trp Leu Ile Gly Ile Ile Tyr Ala Val Ser Glu Ala
                   150
                                        155
Thr Ala Thr Leu Gln Leu Pro Leu Cys Gly Ser Asn Lys Leu Asp His
                                    170
                165
Leu Val Cys Glu Ile Pro Val Leu Ile Lys Ile Ala Cys Gly Glu Lys
                                185
                                                    190
Gly Ser Asn Glu Leu Thr Leu Ser Val Val Cys Ile Phe Met Leu Ala
                            200
                                                205
Val Pro Leu Cys Leu Ile Leu Ala Ser Tyr Ala Ser Ile Gly Ser Ala
                        215
                                            220
Val Phe Lys Ile Lys Ser Ser Lys Gly Arg Lys Lys Ala Phe Gly Thr
                    230
                                        235
Cys Ser Ser His Leu Ile Val Val Phe Leu Phe Tyr Gly Pro Ala Ile
                245
                                    250
Ser Met Tyr Leu Gln Pro Pro Ser Ser Ile Ser Arg Asp Gln Pro Lys
                                265
Phe Met Ala Leu Phe Tyr Gly Val Val Thr Pro Ser Leu Asn Pro Phe
                            280
                                                285
Ile Tyr Thr Leu Arg Asn Lys Asn Val Lys Gly Ala Leu Arg Asn Leu
                      295
Val Arg Ser Ile Phe Ser Phe Lys Xaa Xaa Trp
                  310
<210> 2060
<211> 311
<212> PRT
<213> Homo sapien (4190944-1-137143-138613)
<400> 2060
Met Glu Ile Lys Asn Tyr Ser Ser Ser Thr Ser Gly Phe Ile Leu Leu
                                    10
Gly Leu Ser Ser Asn Pro Gln Leu Gln Lys Pro Leu Phe Ala Ile Phe
            20
                                25
Leu Ile Met Tyr Leu Leu Ala Ala Val Gly Asn Val Leu Ile Ile Pro
        35
                            40
Ala Ile Tyr Ser Asp Pro Arg Leu His Thr Pro Met Tyr Phe Phe Leu
                       55
Ser Asn Leu Ser Phe Met Asp Ile Cys Phe Thr Thr Val Ile Val Pro
                    70
                                        75
Lys Met Leu Val Asn Phe Leu Ser Glu Thr Lys Val Ile Ser Tyr Val
                                    90
Gly Cys Leu Ala Gln Met Tyr Phe Phe Met Ala Phe Gly Asn Thr Asp
```

```
100
                               105
Ser Tyr Leu Leu Ala Ser Met Ala Ile Asp Arg Leu Val Ala Ile Cys
                          120
Asn Pro Leu His Tyr Asp Val Val Met Lys Pro Arg His Cys Leu Leu
                       135
                                          140
Met Leu Leu Gly Ser Cys Ser Ile Ser His Leu His Ser Leu Phe Arg
                                      155
                   150
Val Leu Leu Met Ser Arg Leu Ser Phe Cys Ala Ser His Ile Ile Lys
                                 170
              165
His Phe Phe Cys Asp Thr Gln Pro Val Leu Lys Leu Ser Cys Ser Asp
          180
                              185
Thr Ser Ser Ser Gln Met Val Val Met Thr Glu Thr Leu Ala Val Ile
                          200
                                             205
Val Thr Pro Phe Leu Cys Ile Ile Phe Ser Tyr Leu Arg Ile Met Val
            215
                                         220
Thr Val Leu Arg Ile Pro Ser Ala Ala Gly Lys Trp Lys Ala Phe Ser
                                      235
                  230
Thr Cys Gly Ser His Leu Thr Ala Val Ala Leu Phe Tyr Gly Ser Ile
              245
                                  250
Ile Tyr Val Tyr Phe Arg Pro Leu Ser Met Tyr Ser Val Val Arg Asp
           260
                              265
                                                 270
Arg Val Ala Thr Val Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro
                                              285
       275
                          280
Phe Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys Arg Gly Leu Lys Lys
                     295
Leu Gln Asp Arg Ile Tyr Arg
<210> 2061
<211> 145
<212> PRT
<213> Homo sapien (4190944-1-141327-142434)
<220>
<221> VARIANT
<222> (1)...(145)
<223> Xaa = Any Amino Acid
<400> 2061
Met Thr Thr Pro Phe Asn Ser Ser Leu Ile Met Phe Ser Leu Leu Asp
                       10
     5
Ser Ser Met Pro Glu Ile Leu Cys Pro Leu Pro Tyr Phe Phe Leu Gly
                              25
Ser His Ala Thr His Ser Ser Xaa Leu Ser Ser Leu Thr Leu Ile Asn
                          40
Arg Xaa Asn Met Phe Ser Glu Leu Asn Ser Pro Tyr Phe Ser Ile Glu
Leu Asn Leu Lys Tyr Leu Tyr Ile Cys Asn Lys Leu Thr Leu Glu Lys
                   70
                                      75
Pro Asn Thr Phe Phe Xaa Thr Phe Cys Val Leu Ser Thr Asn Glu Arg
               85
                                  90
Pro Met Val Leu Phe Leu Tyr Cys Ile Gln Pro Ala Phe Trp Ile Pro
          100
                              105
Ile Trp Xaa Asn Lys Glu Leu Ala Arg Arg Phe Leu Val Tyr Ser Gln
                          120
                                             125
       115
Gly Leu Cys Ser Ser Ile Xaa Asp Asn Val Thr Arg Cys Pro Glu Ala
                     135
                                          140
Cys
145
<210> 2062
```

```
<211> 318
<212> PRT
<213> Homo sapien (4190944-1-15386-17112)
<400> 2062
Met Met Ser Phe Ala Pro Asn Ala Ser His Ser Pro Val Phe Leu Leu
                                    10
Leu Gly Phe Ser Arg Ala Asn Ile Ser Tyr Thr Leu Leu Phe Phe Leu
           20
                                25
Phe Leu Ala Ile Tyr Leu Thr Thr Ile Leu Gly Asn Val Thr Leu Val
                            40
Leu Leu Ile Ser Trp Asp Ser Arg Leu His Ser Pro Met Tyr Tyr Leu
                        55
Leu Arg Gly Leu Ser Val Ile Asp Met Gly Leu Ser Thr Val Thr Leu
Pro Gln Leu Leu Ala His Leu Val Ser His Tyr Pro Thr Ile Pro Ala
                                    90
Ala Arg Cys Leu Ala Gln Phe Phe Phe Phe Tyr Ala Phe Gly Val Thr
                                105
                                                    110
Asp Thr Leu Val Ile Ala Val Met Ala Leu Asp Arg Tyr Val Ala Ile
                            120
                                                125
Cys Asp Pro Leu His Tyr Ala Leu Val Met Asn His Gln Arg Cys Ala
                                            140
                        135
Cys Leu Leu Ala Leu Ser Trp Val Val Ser Ile Leu His Thr Met Leu
                                        155
                    150
Arg Val Gly Leu Val Leu Pro Leu Cys Trp Thr Gly Asp Ala Gly Gly
                                    170
                165
Asn Val Asn Leu Pro His Phe Phe Cys Asp His Arg Pro Leu Leu Arg
                                185
                                                    190
Ala Ser Cys Ser Asp Ile His Ser Asn Glu Leu Ala Ile Phe Phe Glu
                            200
                                                205
Gly Gly Phe Leu Met Leu Gly Pro Cys Ala Leu Ile Val Leu Ser Tyr
                                            220
                        215
Val Arg Ile Gly Ala Ala Ile Leu Arg Leu Pro Ser Ala Ala Gly Arg
                    230
                                        235
Arg Arg Ala Val Ser Thr Cys Gly Ser His Leu Thr Met Val Gly Phe
                245
                                    250
Leu Tyr Gly Thr Ile Ile Cys Val Tyr Phe Gln Pro Pro Phe Gln Asn
            260
                                265
Ser Gln Tyr Gln Asp Met Val Ala Ser Val Met Tyr Thr Ala Ile Thr
                                                285
                            280
Pro Leu Ala Asn Pro Phe Val Tyr Ser Leu His Asn Lys Asp Val Lys
                        295
Gly Ala Leu Cys Arg Leu Leu Glu Trp Val Lys Val Asp Pro
                    310
<210> 2063
<211> 317
<212> PRT
<213> Homo sapien (4190944-1-176262-177597)
Met Asn Ser Glu Asn Leu Thr Arg Ala Ala Val Ala Pro Ala Glu Phe
                                    10
Val Leu Leu Gly Ile Thr Asn Arg Trp Asp Leu Arg Val Ala Leu Phe
                                25
Leu Thr Cys Leu Pro Val Tyr Leu Val Ser Leu Leu Gly Asn Met Gly
                                                45
                            40
Met Ala Leu Leu Ile Arg Met Asp Ala Arg Leu His Thr Pro Met Tyr
                        55
```

Phe Phe Leu Ala Asn Leu Ser Leu Leu Asp Ala Cys Tyr Ser Ser Ala

```
70
Ile Gly Pro Lys Met Leu Val Asp Leu Leu Pro Arg Ala Thr Ile
                                   90
Pro Tyr Thr Ala Cys Ala Leu Gln Met Phe Val Phe Ala Gly Leu Ala
           100
                               105
Asp Thr Glu Cys Cys Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val
                                               125
                          120
Ala Ile Arg Asn Pro Leu Leu Tyr Thr Thr Ala Met Ser Gln Arg Leu
                                           140
                      135
Cys Leu Ala Leu Leu Gly Ala Ser Gly Leu Gly Gly Ala Val Ser Ala
                150
                                       155
Phe Val His Thr Thr Leu Thr Phe Arg Leu Ser Phe Cys Arg Ser Arg
                                   170
               165
Lys Ile Asn Ser Phe Phe Cys Asp Ile Pro Pro Leu Leu Ala Ile Ser
                               185
           180
Cys Ser Asp Thr Ser Leu Asn Glu Leu Leu Phe Ala Ile Cys Gly
                          200
Phe Ile Gln Thr Ala Thr Val Leu Ala Ile Thr Val Ser Tyr Gly Phe
                       215
                                           220
Ile Ala Gly Ala Val Ile His Met Arg Ser Val Glu Gly Ser Arg Arg
                                       235
                  230
Ala Ala Ser Thr Gly Gly Ser His Leu Thr Ala Val Ala Met Met Tyr
                                   250
               245
Gly Thr Leu Ile Phe Met Tyr Leu Arg Pro Ser Ser Ser Tyr Ala Leu
                               265
                                                   270
           260
Asp Thr Asp Lys Met Ala Ser Val Phe Tyr Thr Leu Val Ile Pro Ser
                                               285
                           280
       275
Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Glu Ala
                       295
                                           300
Leu Arg Gln Thr Trp Ser Arg Phe His Cys Pro Gly Gln
                   310
<210> 2064
<211> 314
<212> PRT
<213> Homo sapien (4190944-1-2029-4183)
<400> 2064
Met Asp Asn Ser Asn Trp Thr Ser Val Ser His Phe Val Leu Leu Gly
                                   10
Ile Ser Thr His Pro Glu Glu Gln Ile Pro Leu Phe Leu Val Phe Ser
                               25
           20
Leu Met Tyr Ala Ile Asn Ile Ser Gly Asn Leu Ala Ile Ile Thr Leu
                           40
       35
Ile Leu Ser Ala Pro Arg Leu His Ile Pro Met Tyr Ile Phe Leu Ser
                       55
                                           60
Asn Leu Ala Leu Thr Asp Ile Cys Phe Thr Ser Thr Thr Val Pro Lys
                                       75
                   70
Met Leu Gln Ile Ile Phe Ser Pro Thr Lys Val Ile Ser Tyr Thr Gly
                                   90
               85
Cys Leu Ala Gln Thr Tyr Phe Phe Ile Cys Phe Ala Val Met Glu Asn
                               105
Phe Ile Leu Ala Val Met Ala Tyr Asp Arg Tyr Ile Ala Ile Cys His
                                               125
                           120
Pro Phe His Tyr Thr Met Ile Leu Thr Arg Met Leu Cys Val Lys Met
                                           140
                       135
Val Val Met Cys His Ala Leu Ser His Leu His Ala Met Leu His Thr
                                       155
                   150
Phe Leu Ile Gly Gln Leu Ile Phe Cys Ala Asp Asn Arg Ile Pro His
                                   170
Phe Phe Cys Asp Leu Tyr Ala Leu Met Lys Ile Ser Cys Thr Ser Thr
```

```
185
Tyr Leu Asn Thr Leu Met Ile His Thr Glu Gly Ala Val Val Ile Ser
                          200
Gly Ala Leu Ala Phe Ile Thr Ala Ser Tyr Ala Cys Ile Ile Leu Val
                       215
                                           220
Val Leu Arg Ile Pro Ser Ala Lys Gly Arg Trp Lys Thr Phe Ser Thr
                   230
                                       235
Cys Gly Ser His Leu Thr Val Val Ala Ile Phe Tyr Gly Thr Leu Ser
                                   250
Trp Val Tyr Phe Arg Pro Leu Ser Ser Tyr Ser Val Thr Lys Gly Arg
                               265
                                               270
Ile Ile Thr Val Val Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                        280
                                              285
Ile Tyr Ser Leu Arg Asn Gly Asp Val Lys Gly Phe Met Lys Trp
                   295
Met Ser Arg Met Gln Thr Phe Phe Arg
                   310
<210> 2065
<211> 216
<212> PRT
<213> Homo sapien (438406-1-1-648)
<400> 2065
Val Leu Asp Val Gly Cys Ile Thr Val Thr Val Pro Ala Met Leu Gly
                5
Arg Leu Leu Ser His Lys Ser Thr Ile Ser Tyr Asp Ala Cys Leu Ser
         20
                               25
Gln Leu Phe Phe Phe His Leu Leu Ala Gly Met Asp Cys Phe Leu Leu
                           40
                                               45
Thr Ala Met Ala Tyr Asp Arg Leu Leu Gly Ile Cys Gln Ala Leu Thr
                       55
Tyr Arg Thr Arg Met Ser Gln Thr Val Gln Arg Met Leu Val Ala Ala
                   70
Ser Trp Ala Cys Ala Phe Thr Asn Ala Leu Thr His Thr Val Gly Met
               85
                                   90
Ser Thr Leu Asn Phe Cys Gly Pro Asn Val Ile Asn His Phe Tyr Cys
          100
                               105
Asp Leu Pro Gln Leu Phe Lys Leu Ser Cys Ser Ser Thr Gln Leu Asn
                           120
                                               125
Glu Leu Leu Phe Ala Val Gly Phe Ile Met Ala Gly Thr Pro Met
                       135
Ala Leu Ile Val Ile Ser Tyr Ile His Val Ala Ala Ala Val Leu Arg
                   150
                                       155
Ile Arg Ser Val Glu Gly Arg Lys Lys Ala Phe Ser Thr Cys Gly Ser
                                   170
His Leu Thr Val Val Ala Ile Phe Tyr Gly Ser Gly Ile Phe Asn Tyr
                              185
          180
                                                  190
Met Arg Leu Gly Ser Thr Lys Leu Ser Asp Lys Asp Lys Ala Val Gly
                          200
Ile Phe Asn Thr Val Ile Asn Pro
   210
<210> 2066
<211> 318
<213> Homo sapien (4581418-1-11548-14170)
<400> 2066
Met Asp Gln Ser Asn Tyr Ser Ser Leu His Gly Phe Ile Leu Leu Gly
```

```
Phe Ser Asn His Pro Lys Met Glu Met Ile Leu Ser Gly Val Val Ala
                                25
            20
Ile Phe Tyr Leu Ile Thr Leu Val Gly Asn Thr Ala Ile Ile Leu Ala
                            40
                                                45
Ser Leu Leu Asp Ser Gln Leu His Thr Pro Met Tyr Phe Phe Leu Arg
                                            60
                       55
Asn Leu Ser Phe Leu Asp Leu Cys Phe Thr Thr Ser Ile Ile Pro Gln
                                        75
                    70
Met Leu Val Asn Leu Trp Gly Pro Asp Lys Thr Ile Ser Tyr Val Gly
Cys Ile Ile Gln Leu Tyr Val Tyr Met Trp Leu Gly Ser Val Glu Cys
                               105
            100
Leu Leu Leu Ala Val Met Ser Tyr Asp Arg Phe Thr Ala Ile Cys Lys
                           120
                                               125
Pro Leu His Tyr Phe Val Val Met Asn Pro His Leu Cys Leu Lys Met
                                           140
                       135
Ile Ile Met Ile Trp Ser Ile Ser Leu Ala Asn Ser Val Val Leu Cys
                   150
                                       155
Thr Leu Thr Leu Asn Leu Pro Thr Cys Gly Asn Asn Ile Leu Asp His
                                                       175
               165
                                   170
Phe Leu Cys Glu Leu Pro Ala Leu Val Lys Ile Ala Cys Val Asp Thr
                               185
                                                    190
           180
Thr Thr Val Glu Met Ser Val Phe Ala Leu Gly Ile Ile Ile Val Leu
                                                205
       195
                            200
Thr Pro Leu Ile Leu Ile Leu Ile Ser Tyr Gly Tyr Ile Ala Lys Ala
                        215
                                            220
Val Leu Arg Thr Lys Ser Lys Ala Ser Gln Arg Lys Ala Met Asn Thr
                                       235
                    230
Cys Gly Ser His Leu Thr Val Val Ser Met Phe Tyr Gly Thr Ile Ile
                                   250
Tyr Met Tyr Leu Gln Pro Gly Asn Arg Ala Ser Lys Asp Gln Gly Lys
                                                    270
                                265
Phe Leu Thr Leu Phe Tyr Thr Val Ile Thr Pro Ser Leu Asn Pro Leu
                          280
                                                285
       275
Ile Tyr Thr Leu Arg Asn Lys Asp Met Lys Asp Ala Leu Lys Lys Leu
                      295
                                            300
Met Arq Phe His His Lys Ser Thr Lys Ile Lys Arg Asn Cys
                    310
                                        315
<210> 2067
<211> 257
<212> PRT
<213> Homo sapien (4581418-1-39007-42459)
<220>
<221> VARIANT
<222> (1)...(257)
<223> Xaa = Any Amino Acid
<400> 2067
Phe Ile Leu Trp Gly Phe Phe Asp His Pro Xaa Pro Glu Met Phe Leu
                                    10
Phe Ile Met Gly Leu Val Gly Leu Ser Leu His Thr Gly Gly Gln His
                                25
           20
Leu Asn Tyr Cys Gly Thr Gln Gly Ile Phe Xaa Gly Ser Thr Lys Cys
                                                45
                            40
Ile Ile Leu Ala Val Thr Ser Leu Asp Pro Tyr Ile Ala Ile Cys Lys
                       55
                                            60
His Leu Arg Tyr Pro Ala Ile Met His Gln Gln Leu Cys Val Leu Leu
```

Val Ala Met Ala Trp Leu Ser Ser Leu Ala Asn Ser Leu Gln Ser Ser

70

75

```
90
Leu Ala Val Gln Leu Pro Leu Gly Gly Asn Lys Val Asp Asp Phe Leu
                              105
Cys Glu Val Ser Ala Met Ile Lys Ile Ser Arg Phe Asp Thr Thr Phe
                           120
Asn Val Ser Met Leu Ser Ile Val Arg Ile Phe Xaa Ser Leu Val Leu
                       135
                                           140
Xaa Ser Ile Ile Phe Ala Tyr Cys Gly Phe Ile Val Ala Thr Val Leu
                   150
                                       155
Arg Ile Gln Ser Ser Gly Gly Lys Lys Glu Val Phe Asn Thr Cys Gly
                                   170
                                                        175
Ser His Ile Val Ser Leu Leu Tyr Gly Pro Val Ile Ser Met Tyr Val
                               185
            180
Gln Pro Ser Ala Asn Ser Gln Asp Lys Asn Lys Phe Met Ser Leu Phe
                           200
Tyr Ser Leu Val Thr Pro Met Leu Asn Pro Phe Ile Tyr Thr Leu Ser
                                            220
                       215
Asn Arg Asp Ile Lys Gly Ala Met Arg Arg Leu Leu Val Phe Leu Tyr
                   230
                                       235
His Gln Glu Glu Asn Lys Ser Asn Tyr Cys Leu Tyr Ser Thr Phe Phe
                                    250
Ile
<210> 2068
<211> 309
<212> PRT
<213> Homo sapien (5081803-1-1-930)
<400> 2068
Met Lys Lys Glu Asn Gln Ser Phe Asn Leu Asp Phe Ile Leu Leu Gly
Val Thr Ser Gln Glu Glu Asn Asn Val Phe Phe Val Ile Phe Leu
                                25
Cys Ile Tyr Pro Ile Thr Leu Thr Gly Asn Leu Leu Ile Ile Leu Ala
                           40
Ile Cys Ala Asp Ile Arg Leu His Asn Pro Met Tyr Phe Leu Leu Ala
                                           60
                       55
Asn Leu Ser Leu Val Asp Ile Ile Phe Ser Ser Val Thr Ile Pro Lys
                   70
Val Leu Ala Asn His Leu Leu Gly Ser Lys Phe Ile Ser Phe Gly Gly
Cys Leu Met Gln Met Tyr Phe Met Ile Ala Leu Ala Lys Ala Asp Ser
                                105
Tyr Thr Leu Ala Ala Met Ala Tyr Asp Arg Ala Val Ala Ile Ser Cys
                           120
                                                125
Pro Leu His Tyr Thr Thr Ile Met Ser Pro Arg Ser Cys Ile Leu Leu
                                           140
                       135
Ile Ala Gly Ser Trp Val Ile Gly Asn Thr Ser Ala Leu Pro His Thr
                   150
                                       155
Leu Leu Thr Ala Ser Leu Ser Phe Cys Gly Asn Gln Glu Val Ala Asn
                                   170
               165
Phe Tyr Cys Asp Ile Met Pro Leu Leu Lys Leu Ser Cys Ser Asp Val
                                185
           180
His Phe Asn Val Lys Met Met Tyr Leu Gly Val Gly Val Phe Ser Leu
                           200
Pro Leu Leu Cys Ile Ile Val Ser Tyr Val Gln Val Phe Ser Thr Val
                                            220
                       215
Phe Gln Val Pro Ser Thr Lys Ser Leu Phe Lys Ala Phe Cys Thr Cys
                   230
                                       235
Gly Ser His Leu Thr Val Val Phe Leu Tyr Tyr Gly Thr Thr Met Gly
```

```
250
               245
Met Tyr Phe Arg Pro Leu Thr Ser Tyr Ser Pro Lys Asp Ala Val Ile
           260
                              265
Thr Val Met Tyr Val Ala Val Thr Pro Ala Leu Asn Pro Phe Ile Tyr
                                       285
               280
Ser Leu Arg Asn Trp Asp Met Lys Ala Ala Leu Gln Lys Leu Phe Ser
                       295
Lys Arg Ile Ser Ser
305
<210> 2069
<211> 272
<212> PRT
<213> Homo sapien (5262456-1-1-1993)
<400> 2069
Met Trp Ile Asn Asn Gln Ser Ser Leu Asp Asp Phe Ile Leu Leu Gly
                                  10
Phe Ser Asp Arg Pro Trp Leu Glu Thr Pro Leu Val Ile Phe Leu Val
           20
                               25
Ala Tyr Ile Phe Ser Leu Phe Gly Asn Ile Ser Ile Ile Leu Val Ser
                           40
His Leu Asp Pro Gln Leu Asp Ser Pro Met Tyr Phe Phe Val Ser Asn
                      55
                                          60
Leu Ser Phe Leu Asp Leu Cys Tyr Thr Thr Ser Thr Val Pro Gln Met
                   70
                                      75
Leu Val Asn Leu Arg Gly Pro Glu Lys Thr Ile Ser Tyr Gly Gly Cys
                                   90
Val Ala Gln Leu Tyr Ile Phe Leu Ala Leu Gly Ser Thr Glu Cys Ile
           100
                               105
Leu Leu Ala Ile Met Ala Phe Asp Arg Tyr Ala Ala Ile Cys Lys Pro
                           120
                                              125
Leu His Tyr Pro Val Ile Met Asn His Arg Arg Cys Ile His Met Ala
                       135
                                           140
Ala Gly Thr Trp Ile Ser Gly Phe Ala Asn Ser Leu Val Gln Ser Thr
                   150
                                       155
Leu Thr Val Val Ala Pro Arg Cys Gly Gln Arg Val Leu Asp His Phe
                                  170
Phe Cys Glu Val Pro Ala Leu Leu Lys Leu Ala Cys Ile Asp Ile Arg
           180
                              185
Val Asn Glu Met Glu Leu Asn Val Leu Gly Ala Leu Leu Leu Met
                          200
Pro Leu Thr Leu Ile Leu Gly Thr Tyr Val Phe Ile Ala Gln Ala Val
                       215
                                           220
Met Arg Ile Cys Ser Ala Glu Ser Arg Trp Lys Ala Phe Asn Thr Cys
                   230
                                       235
Ala Ser His Leu Leu Val Val Ser Leu Phe Tyr Phe Thr Ala Ile Ser
                                250
              245
Met Tyr Val Gln Pro Pro Ser Ser Tyr Ser His Asp Arg Gly Lys Ile
                               265
           260
<210> 2070
<211> 356
<213> Homo sapien (5262456-1-22068-24947)
<220>
<221> VARIANT
<222> (1)...(356)
```

<223> Xaa = Any Amino Acid

```
<400> 2070
 Met Ile Asn Asp Ser His Phe Ser Gly Phe Ile Leu Leu Gly Phe Thr
                                     10
 Gly Gln Pro Gln Leu Gln Met Met Ile Ser Gly Val Val Phe Phe
                                 25
 Tyr Thr Ile Ala Phe Met Gly Asn Met Ala Ile Ile Leu Leu Ser Phe
 Leu Asp Asp His Leu Gln Val Pro Met Tyr Phe Phe Leu Arg Asn Leu
                        55
 Ala Ile Leu Asp Leu Cys Tyr Thr Thr Asn Ile Val Pro Gln Met Leu
                    70
 Val Ser Ile Trp Gly Lys Asp Lys Arg Ile Thr Phe Gly Gly Cys Ala
                                    90
 Phe Gln Leu Phe Ile Asp Val Ala Leu Tyr Ser Val Glu Cys Ile Leu
                                105
 Leu Ser Met Met Ser Tyr Asp Arg Leu Asn Ala Ile Cys Lys Pro Leu
                           120
 His His Met Thr Ile Met Asn Leu Gln Leu Cys Gln Gly Leu Val Val
                        135
                                            140
 Ile Ser Trp Val Val Gly Val Ile Asn Cys Ile Ile Pro Ser Pro Tyr
                   150
                                        155
 Ala Thr Ser Leu Pro Arg Cys Arg Asn His His Leu Asp His Phe Phe
               165
                                   170
 Val Cys Val Lys Cys Leu Gln Xaa Ser Arg Phe Lys Ile Ala Cys Val
           180
                               185
 Asp Thr Thr Ala Met Glu Val Thr Thr Phe Ala Met Cys Leu Ile Ile
                            200
                                                205
 Val Leu Val Pro Leu Leu Ile Leu Val Ser Tyr Gly Phe Ile Ala
                        215
                                            220
Val Ala Val Leu Lys Ile Lys Ser Ala Ala Gly Arg Gln Lys Ala Phe
                    230
                                        235
Gly Thr Cys Ser Ser His Leu Val Val Val Ser Ile Phe Cys Gly Thr
                245
                                    250
Val Thr Tyr Met Tyr Ile Gln Pro Gly Asn Ser Pro Asn Gln Asn Glu
            260
                                265
Gly Lys Leu Leu Ser Ile Phe Tyr Ser Ile Val Thr Pro Ser Leu Asn
                            280
Pro Leu Ile Tyr Thr Val Arg Asn Lys Glu Phe Lys Gly Ala Met Lys
                        295
                                            300
Arg Leu Thr Gly Lys Glu Lys Asp Cys Met Glu Lys Arg Gly His Xaa
                                        315
Phe Phe Leu Pro Ala Ile Ser Asn Met Ala Ile Asp Leu Pro Asn Leu
               325
                                   330
Lys Cys Arg Gln Phe Ile Leu Xaa Ile Asn Cys Leu His Leu Arg Xaa
           340
                               345
Arg Xaa Tyr Pro
       355
<210> 2071
<211> 338
<212> PRT
<213> Homo sapien (5679453-1-2929-5456)
<220>
<221> VARIANT
<222> (1)...(338)
<223> Xaa = Any Amino Acid
<400> 2071
Met Ile Leu Pro Ala Ser Phe Ser Xaa Gly Thr Met Glu Thr Ser Ser
               5
                                   10
```

```
Val Ser Ser Gly Thr Asp Phe Ile Leu Leu Gly Phe Ser Asp Arg Pro
Gln Leu Glu His Ile Ile Ser Val Val Val Phe Ile Ile Tyr Ile Val
                            40
                                                45
Thr Leu Val Gly Asn Thr Thr Ile Ile Leu Val Ser Tyr Leu Asp Thr
                       55
                                            60
Gln Leu His Thr Phe Met Tyr Phe Phe Leu Ser Asn Leu Ser Phe Leu
                   70
Asp Leu Cys Tyr Thr Thr Ser Ile Ile Pro Gln Met Leu Ala Asn Gln
               85
Trp Gly Pro Lys Lys Ser Ile Thr Tyr Gly Gly Cys Val Leu Gln Phe
                               105
Phe Phe Val Leu Asp Leu Gly Ala Thr Glu Cys Leu Leu Leu Ala Val
                           120
        115
Met Ala Tyr Asp Arg Tyr Ala Ala Val Cys Gln Pro Leu His Tyr Thr
                       135
Leu Lys Cys Thr Leu Ser Phe Ala Thr Ala Trp Leu Ser Gly Leu Ala
                   150
                                       155
Ser Ala Leu Ile Val Cys Ser Leu Thr Leu Lys Leu Pro Arg Cys Gly
                                170
               165
His Arg Glu Val Asp Asn Phe Phe Cys Glu Met Pro Ala Leu Ile Lys
                               185
           180
Met Ala Cys Val Tyr Ser Lys Val Ile Glu Ile Val Val Phe Ala Phe
                            200
                                                205
        195
Gly Val Val Phe Leu Phe Val Pro Leu Ser Leu Ile Leu Ile Ser Tyr
                                            220
                       215
Gly Val Ile Thr Gln Ala Val Met Arg Ile Lys Ser Ala Thr Arg Leu
                   230
                                       235
Gln Lys Ile Leu Asn Thr Cys Gly Ser His Leu Thr Val Val Ile Leu
                                   250
               245
Phe Tyr Gly Thr Ile Ile Tyr Ile Tyr Met Lys Pro Gln Asn Thr Ile
                                                    270
                               265
           260
Ser Gln Asp Glu Gly Lys Phe Ser Leu Phe Tyr Thr Ile Ile Thr Pro
                                                285
                           280
Ser Leu Asn Leu Pro Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys Ser
                                           300
                       295
Ala Leu Lys Arg Ile Leu Trp Met Lys Lys Ser Ser Ala Glu Xaa Met
                                      315
                   310
Asn Xaa Met Glu Lys Ser Arg Met Xaa Ser Thr Lys Glu Ile Leu Ala
                                   330
Phe Ile
```

<210> 2072

<211> 308

<212> PRT

<213> Homo sapien (5791525-1-119325-122054)

<400> 2072

 Met Ala Met Asp Asn Val Thr Ala Val Phe Gln Phe Leu Leu Ile Gly

 1
 5

 Ile Ser Asn Tyr Pro Gln Trp Arg Asp Thr Phe Phe Thr Leu Val Leu 20

 Ile Ile Tyr Leu Ser Thr Leu Leu Gly Asn Gly Phe Met Ile Phe Leu 30

 Ile His Phe Asp Pro Asn Leu His Thr Pro Ile Tyr Phe Phe Leu Ser 50

 Asn Leu Ser Phe Leu Asp Leu Cys Tyr Gly Thr Ala Ser Met Pro Gln

Asn Leu Ser Phe Leu Asp Leu Cys Tyr Gly Thr Ala Ser Met Pro Gli 65 70 75 80 Ala Leu Val His Cys Phe Ser Thr His Pro Tyr Leu Ser Tyr Pro Arg

85 90 95

```
Cys Leu Ala Gln Thr Ser Val Ser Leu Ala Leu Ala Thr Ala Glu Cys
                              105
         100
Leu Leu Leu Ala Ala Met Ala Tyr Asp Arg Val Val Ala Ile Ser Asn
                           120
Pro Leu Arg Tyr Ser Val Val Met Asn Gly Pro Val Cys Val Cys Leu
                                          140
                      135
Val Ala Thr Ser Trp Gly Thr Ser Leu Val Leu Thr Ala Met Leu Ile
                                      155
                  150
Leu Ser Leu Arg Leu His Phe Cys Gly Ala Asn Val Ile Asn His Phe
                                 170
              165
Ala Cys Glu Ile Leu Ser Leu Ile Lys Leu Thr Cys Ser Asp Thr Ser
                                       190
           180
                              185
Leu Asn Glu Phe Met Ile Leu Ile Thr Ser Ile Phe Thr Leu Leu Leu
                                              205
                          200
Pro Phe Gly Phe Val Leu Leu Ser Tyr Ile Arg Ile Ala Met Ala Ile
                                          220
                      215
Ile Arg Ile Arg Ser Leu Gln Gly Arg Leu Lys Ala Phe Thr Thr Cys
                                       235
               230
Gly Ser His Leu Thr Val Val Thr Ile Phe Tyr Gly Ser Ala Ile Ser
                                   250
            245
Met Tyr Met Lys Thr Gln Ser Lys Ser Tyr Pro Asp Gln Asp Lys Phe
                               265
                                                  270
           260
Ile Ser Val Phe Tyr Gly Ala Leu Thr Pro Met Leu Asn Pro Leu Ile
                                              285
                           280
Tyr Ser Leu Arg Lys Lys Asp Val Lys Arg Ala Ile Arg Lys Val Met
                       295
Leu Lys Arg Thr
305
<210> 2073
<211> 314
<212> PRT
<213> Homo sapien (5791525-1-456-2065)
<220>
<221> VARIANT
<222> (1)...(314)
<223> Xaa = Any Amino Acid
<400> 2073
Met His Gln Gly Asn Xaa Thr Thr Val Ser Lys Phe Phe Leu Leu Gly
                                   10
Ile Thr Thr Lys Pro Lys Glu Gln Gln Phe Ile Phe Met Leu Phe Leu
                               25
           20
Cys Thr Tyr Leu Val Thr Met Val Arg Asn Leu Leu Ile Ile Leu Ala
 35
                           40
Val Val Ser Asp Ala His Leu His Gly Pro Ile Tyr Phe Phe Leu Ala
                                           60
Asn Leu Ser Phe Thr Asn Val Cys Ile Thr Thr Thr Thr Val Pro Lys
                                       75
                    70
Ile Leu Ala Asp Ile Gln Ser Gln Asn Ser Thr Ile Ser Phe Glu Gly
                                   90
               85
Cys Pro Ala Gln Met Xaa Phe Xaa Ile Phe Leu Val Asp Leu Asp Asn
            100
                               105
Phe Leu Leu Val Asp Met Ala Tyr Asn Xaa Tyr Ile Ala Ile Cys His
                           120
Pro Leu His Tyr Thr Val Val Leu Ser Pro Lys Asn Cys Ala Leu
                       135
                                           140
Leu Val Val Thr Pro Trp Val Ile Ser Asn Leu Val Ser Ile Leu His
                                      155
                150
Leu Ser Leu Leu Ser His Leu Thr Phe Cys Ile Ser His Ile Phe Tyr
```

```
170
Asp Leu Glu Pro Ile Leu Gly Leu Ala Cys Ser Asp Thr Gln Ile Asn
                               185
            180
Asn Leu Ile Ile Thr Ala Ile Gly Glu Val Val Ile Phe Ile Pro Phe
                           200
                                               205
        195
Thr Cys His Ile Leu Val Ser Tyr Gly Leu Ile Gly Ser Thr Met Leu
                       215
                                           220
Gly Val Pro Ser Ala Lys Gly Lys Xaa Lys Thr Phe Ser Thr Cys Gly
                                       235
                   230
Ser His Leu Ser Val Val Pro Gln Val Phe Tyr Gly Phe Ile Ile Gly
                                   250
               245
Val Tyr Phe Leu Ser Phe Phe Ala Tyr Ser Ala Glu Arg Asp Glu Val
                                                   270
                                265
           260
Ala Ala Ile Met Tyr Thr Thr Val Thr His Leu Ile Lys Ser Phe Ile
                           280
                                               285
       275
Cys Ser Leu Arg Asn Glu Asp Met Lys Gly Ala Leu Arg Arg Pro Leu
                                           300
                       295
Ser Arg Gln Gly Phe Ser Gly Val Val Ser
                   310
<210> 2074
<211> 138
<212> PRT
<213> Homo sapien (5823349-1-32238-32756)
<220>
<221> VARIANT
<222> (1) ... (138)
<223> Xaa = Any Amino Acid
<400> 2074
Leu Met Leu Leu Asp Leu Leu Ser Asp Ala Glu Val His Ala Val Ser
                                    10
1
Ser Ser His Cys Ser Leu His Leu Thr Lys Glu Ile Phe Ser Ile Val
           20
                               25
Ser Asn Gln Ala Leu Ser Pro Glu Ser Thr Leu Gly Leu His Met His
                                                45
                           40
       35
Leu Cys Ala Phe Leu Thr Leu Phe Pro Leu Pro Arg Thr Pro Leu Pro
                       55
Ser Phe Leu Ile His Arg Asn Leu Ile His Leu Ser Ser His Ala Gln
                                       75
                   70
Gln Leu Ser Phe Pro Xaa Leu Leu Xaa Lys Tyr Ser Leu Phe Asn Leu
                                   90
               85
Tyr Val Ile Leu Ser Arg Ile Leu Phe Pro Leu His Pro Leu Val Tyr
                               105
           100
Glu Gln Phe Lys Ser Gly Cys Tyr Gly Xaa Phe Ile Ile Lys Ile Leu
                           120
Asn Phe Cys Leu Leu Xaa Val Met Asn Leu
   130
<210> 2075
<211> 162
<212> PRT
<213> Homo sapien (5931513-1-1-2929)
<400> 2075
Met Asn Val Ser Glu Pro Asn Ser Ser Phe Ala Phe Val Asn Glu Phe
                                    10
                5
1
Ile Leu Gln Gly Phe Ser Cys Glu Trp Thr Ile Gln Ile Phe Leu Phe
                                25
Ser Leu Phe Thr Thr Tyr Ala Leu Thr Ile Thr Gly Asn Gly Ala
```

PCT/US00/27582

```
WO 01/27158
                            40
Ile Ala Phe Val Leu Trp Cys Asp Arg Arg Leu His Thr Pro Met Tyr
Met Phe Leu Gly Asn Phe Ser Phe Leu Glu Ile Trp Tyr Val Ser Ser
                                        75
Thr Val Pro Lys Met Leu Val Asn Phe Leu Ser Glu Lys Lys Asn Ile
                                    90
Ser Phe Ala Gly Cys Phe Leu Gln Phe Tyr Phe Phe Phe Ser Leu Gly
                               105
Thr Ser Glu Cys Leu Leu Thr Val Met Ala Phe Asp Gln Tyr Leu
                           120
                                                125
Ala Ile Cys Arg Pro Leu Leu Tyr Pro Asn Ile Met Thr Gly His Leu
                                           140
                       135
Tyr Ala Lys Leu Val Ile Leu Cys Trp Val Cys Gly Phe Leu Trp Phe
                   150
Leu Ile
<210> 2076
<211> 318
<212> PRT
<213> Homo sapien (6087993-15-1-2211)
<400> 2076
Met Ile Gln Pro Met Ala Ser Pro Ser Asn Ser Ser Thr Val Pro Val
                                    10
Ser Glu Phe Leu Leu Thr Cys Phe Pro Asn Phe Gln Ser Trp Gln His
                                25
           20
Trp Leu Ser Leu Pro Leu Ser Leu Leu Phe Leu Leu Ala Met Gly Ala
                            40
Asn Thr Thr Leu Leu Ile Thr Ile Gln Leu Glu Ala Ser Leu His Gln
                        55
Pro Leu Tyr Tyr Leu Leu Ser Leu Leu Ser Leu Leu Asp Ile Val Leu
                    70
                                        75
Cys Leu Thr Val Ile Pro Lys Val Leu Ala Ile Phe Trp Tyr Asp Leu
                                    90
Arg Ser Ile Ser Phe Pro Ala Cys Phe Leu Gln Met Phe Ile Met Asn
                               105
           100
Ser Phe Leu Pro Met Glu Ser Cys Thr Phe Met Val Met Ala Tyr Asp
                            120
                                                125
Arg Tyr Val Ala Ile Cys His Pro Leu Arg Tyr Pro Ser Ile Ile Thr
                       135
                                            140
Asn Gln Phe Val Ala Lys Ala Ser Val Phe Ile Val Val Arg Asn Ala
                    150
                                        155
Leu Leu Thr Ala Pro Ile Pro Ile Leu Thr Ser Leu Leu His Tyr Cys
                                    170
                                                        175
```

Gly Glu Asn Val Ile Glu Asn Cys Ile Cys Ala Asn Leu Ser Val Ser

Tyr Thr Phe Ile Leu Arg Ala Val Leu Arg Phe Lys Ala Glu Gly Ala

Ala Val Lys Ala Leu Ser Thr Cys Gly Ser His Phe Ile Leu Ile Leu

Phe Phe Ser Thr Ile Leu Leu Val Val Leu Thr Asn Val Ala Arg 265 Lys Lys Val Pro Met Asp Ile Leu Ile Leu Leu Asn Val Leu His His 280

Leu Ile Pro Pro Ala Leu Asn Pro Ile Val Tyr Gly Val Arg Thr Lys

200 Ala Gly Trp Thr Leu Leu Gly Ser Asp Leu Phe Leu Ile Phe Leu Ser

215

230

245

185 Arg Leu Ser Cys Asp Asn Phe Thr Leu Asn Arg Ile Tyr Gln Phe Val

250

190

205

285

220

235

```
300
                      295
Glu Ile Lys Gln Gly Ile Gln Lys Leu Leu Gln Arg Gly Arg
<210> 2077
<211> 314
<212> PRT
<213> Homo sapien (6087993-21-1-3660)
<400> 2077
Met Leu Leu Ser Asn Ser Ser Trp Arg Leu Ser Gln Pro Ser Phe Leu
                                   10
Leu Val Gly Ile Pro Gly Leu Glu Glu Ser Gln His Trp Ile Ala Leu
           20
                               25
Pro Leu Gly Ile Leu Tyr Leu Leu Ala Leu Val Gly Asn Val Thr Ile
                          40
       35
Leu Phe Ile Ile Trp Met Asp Pro Ser Leu His Gln Ser Met Tyr Leu
                      55
Phe Leu Ser Met Leu Ala Ala Ile Asp Leu Val Leu Ala Ser Ser Thr
                               75
                  70
Ala Pro Lys Ala Leu Ala Val Leu Leu Val His Ala His Glu Ile Gly
                                90
               85
Tyr Ile Val Cys Leu Ile Gln Met Phe Phe Ile His Ala Phe Ser Ser
                               105
        100
Met Glu Ser Gly Val Leu Val Ala Met Ala Leu Asp Arg Tyr Val Ala
                                              125
                           120
Ile Cys His Pro Leu His His Ser Thr Ile Leu His Pro Gly Val Ile
                                          140
                       135
Gly Arg Ile Gly Met Val Val Leu Val Arg Gly Leu Leu Leu Ile
                                      155
                  150
Pro Phe Pro Ile Leu Leu Gly Thr Leu Ile Phe Cys Gln Ala Thr Ile
                                   170
Ile Gly His Ala Tyr Cys Glu His Met Ala Val Val Lys Leu Ala Cys
                               185
                                                   190
          180
Ser Glu Thr Thr Val Asn Arg Ala Tyr Gly Leu Thr Met Ala Leu Leu
                           200
                                               205
Val Ile Gly Leu Asp Val Leu Ala Ile Gly Val Ser Tyr Ala His Ile
                       215
                                           220
Leu Gln Ala Val Leu Lys Val Pro Gly Ser Glu Ala Arg Leu Lys Ala
                                      235
                230
Phe Ser Thr Cys Gly Ser His Ile Cys Val Ile Leu Val Phe Tyr Val
                                                   255
              245
                                  250
Pro Gly Ile Phe Ser Phe Leu Thr His Arg Phe Gly His His Val Pro
                                                   270
                              265
His His Val His Val Leu Leu Ala Thr Arg Tyr Leu Leu Met Pro Pro
                                               285
                       280
Ala Leu Asn Pro Leu Val Tyr Gly Val Lys Thr Gln Gln Ile Arg Gln
                       295
Arg Val Leu Arg Val Phe Thr Gln Lys Asp
                   310
<210> 2078
<211> 327
<212> PRT
<213> Homo sapien (6087993-34-2575-6318)
<220>
<221> VARIANT
<222> (1) ... (327)
<223> Xaa = Any Amino Acid
```

```
<400> 2078
Phe Phe Ser Asn Asn Ser Val Leu Phe Pro His Thr Phe Phe Leu Ala
Gly Ile Pro Gly Leu Thr Ala Thr His Ile Trp Ile Leu Leu Pro Phe
            20
Cys Phe Met Phe Phe Leu Ser Leu Thr Gly Asn Gly Val Leu Leu Phe
                             40
Leu Ile Arg Thr Glu Cys Ser Leu Arg Gln Pro Met Phe Leu Phe Leu
                        55
Ala Met Leu Ser Phe Val Asp Leu Val Leu Ser Leu Ser Thr Leu Pro
                    70
                                        75
Lys Met Leu Ala Ile Phe Trp Phe Gly Ala Thr Ala Ile Ser Ser His
                                    90
Ser Cys Leu Ser Gln Met Phe Phe Ile His Ala Phe Ser Ala Met Glu
                                105
Ser Gly Val Leu Val Ala Met Ala Leu Asp Arg Ser Val Ala Ile Cys
                            120
                                                125
Asn Pro Leu Arg Tyr Ala Thr Ile Leu Pro Pro Val Val Val Ala Lys
                        135
                                            140
Ile Gly Gly Leu Val Val Leu Xaa Gly Val Gly Leu Thr Ile Ser Phe
                   150
                                        155
Pro Ser Leu Ala His Arg Leu His Tyr His Gly Ser His Met Ile Ala
               165
                                    170
Tyr Thr Phe Cys Glu His Met Ala Val Val Lys Leu Ala Cys Glu Ala
            180
                                185
                                                    190
Thr Thr Val Asp Asn Leu Tyr Ala Phe Val Val Ala Ile Phe Leu Gly
                            200
                                                205
Gly Gly Asp Val Val Cys Ile Ala Tyr Ser Tyr Gly Leu Ile Val Arg
                        215
                                            220
Thr Val Met His Phe Pro Ser Pro Glu Glu Arg Ala Lys Ala Gly Ser
                    230
                                        235
Thr Cys Thr Ala His Val Cys Val Ile Leu Phe Phe Tyr Gly Leu Gly
                245
                                    250
Phe Leu Ser Val Val Met Gln Arg Phe Gly Ala Pro Thr Ala Ser Thr
            260
                                265
Ala Lys Val Ile Leu Ala Asn Leu Tyr Leu Leu Phe Pro Pro Ala Leu
                            280
                                                285
Asp Pro Ile Val Tyr Gly Met Glu Thr Lys Gln Ile Xaa Glu Arg Leu
                        295
                                            300
Leu Met Ile Leu Ser Pro Lys Gln Ile Glu Leu Thr Xaa Val Xaa Leu
                    310
Ser Pro Ala Gly Leu Gln Gly
                325
<210> 2079
<211> 135
<212> PRT
<213> Homo sapien (6087993-36-10518-12399)
<220>
<221> VARIANT
<222> (1)...(135)
<223> Xaa = Any Amino Acid
<400> 2079
Lys Asp Leu Xaa Arg Arg Ser Asn Ile Asn Phe Arg Ile Glu Arg Leu
Tyr Phe Phe Ile Xaa Gly Trp Glu Met Lys Met Gly Leu Xaa Asn Xaa
           20
                                25
Leu Leu Met Phe Cys Glu Ser Phe Xaa Xaa Xaa Lys Thr Val Leu Arg
                            40
```

```
Ile Lys Gly Glu Gly Asp Met Ala Lys Ala Leu Gly Thr Cys Gly Ser
                       55
His Phe Ile Leu Ile Leu Phe Phe Thr Thr Val Leu Leu Val Leu Val
                                       75
                   70
Ile Thr Asn Leu Ala Arg Lys Arg Ile Pro Pro Asp Val Pro Ile Leu
                                   90
               85
Leu Asn Ile Leu His His Leu Ile Pro Pro Ala Leu Asn Pro Ile Val
                               105
                                                   110
           100
Tyr Gly Val Arg Thr Lys Glu Ile Lys Gln Gly Ile Gln Asn Leu Leu
                          120
       115
Arg Arg Leu Xaa Lys Ile Lys
   130
<210> 2080
<211> 141
<212> PRT
<213> Homo sapien (6094601-37-1-3120)
<220>
<221> VARIANT
<222> (1) ... (141)
<223> Xaa = Any Amino Acid
<400> 2080
Met Leu Thr Cys Phe Trp Lys His Leu Xaa Tyr Leu Pro Leu Xaa Phe
           5
                               10
Val Asp Phe Val Leu Ser Lys Lys Pro Ser Asn Xaa Ser Val Ser
                               25
           20
Ile Asn Val Phe Leu Leu Thr Tyr Xaa Xaa Ser Phe Ala Leu Val
                            40
Tyr Leu Cys Phe Asp Lys Leu Phe Trp Ile Cys Asn Pro Leu Ser Gly
                       55
Leu Met Thr Leu Arg Arg Thr Arg Cys Ala Gly Ile Leu Gly Ala Cys
                   70
                                       75
Trp Thr Tyr Ala Phe Thr Ser Thr Ile Arg Xaa Val Phe Phe Phe
                                   90
Asn Leu Lys Asp Lys Leu Phe Phe Gln Met Ser Asn Phe Leu Ser Leu
           100
                               105
Xaa Glu Leu Met Xaa Gly Pro Phe Phe Leu Glu Asn Ser His Met Tyr
                        120
                                               125
Ser Tyr Thr His Lys Leu Cys Leu Leu Phe Xaa Gly Val
   130
<210> 2081
<211> 315
<212> PRT
<213> Homo sapien (6249440-1-23422-29767)
<220>
<221> VARIANT
<222> (1)...(315)
<223> Xaa = Any Amino Acid
<400> 2081
Met Gly Gly Leu Lys Arg Asp Asn Ala Ser Glu Met Thr Glu Leu Ile
                                   10
Leu Val Gly Phe Ala Gln His Pro Glu Ile Gln Thr Ala Phe Phe Leu
           20
                               25
Glu Leu Leu Phe Phe Tyr Xaa Ser Gln Leu Phe Glu Asn Ile Leu Ile
                           40
```

Val Ala Val Val Arg Xaa Asp Ser Arg Leu His Thr Pro Met Gly Phe

```
55
                                             60
 Phe Phe Leu Ser Thr Leu Ser Ser Leu Glu Met Cys Tyr Ser Ile Ser
 Trp Glu Leu Xaa Val Leu Ala Gln Cys Ile Lys Asp Phe Pro Thr Ile
                                     90
 Ser Tyr Asn Ser Cys Ser Val Gln Met Ile Thr His Leu Phe Leu Gly
                                 105
 Thr Ala Gln Cys Leu Leu Leu Ala Gly Met Ala Tyr Asn Arg Phe Val
                             120
 Glu Ile Ser Tyr Leu Leu His Tyr Thr Ile Ile Met Ser Asn Arg Val
                        135
                                             140
 Cys Ile Gln Leu Ala Leu Gly Ile Trp Thr His Ala Phe Leu Val Ala
                     150
                                         155
 Val Thr Leu Ile Ile Ala Ile Pro Ala Ser Tyr Tyr Gly His Asn Val
                 165
                                     170
 Ile Asn His Phe Thr Cys Glu Ile Gln Ala Leu Leu Lys Leu Val Cys
             180
                                 185
 Ser Asp Thr Leu Val Ser Leu Ile Gln Gly Leu Val Ile Ser Val Phe
                             200
 Thr Leu Pro Leu Pro Phe Thr Phe Ile Leu Ile Ser Xaa Phe Cys Ile
                         215
                                             220
 Phe Val Arg Ala Val Glu Ala Arg Arg Glu Ala Phe Ser Thr Cys Gly
                     230
                                        235
 Ser His Leu Thr Gly Val Thr Ile Phe Tyr Gly Ala Ala Ile Cys Met
                                     250
Tyr Leu Lys Pro Gln Ser Lys Gly Thr Gln Glu Glu Asp Lys Val Val
                                 265
                                                     270
Ser Lys Leu Tyr Gly Ala Val Thr Pro Met Leu Asn Pro Pro Ile Tyr
                             280
Ile Gln Arg Asn Lys Asp Ile Lys Gly Ala Leu Arg Lys Leu Ala Lys
                        295
Gly Asn Glu Lys Ser Xaa Gln Phe Ser Leu Asn
                    310
<210> 2082
<211> 295
<212> PRT
<213> Homo sapien (6739493-1-1-1041)
<400> 2082
Met Tyr Ser Phe Met Ala Gly Ser Ile Phe Ile Thr Ile Phe Gly Asn
                                    10
Leu Ala Met Ile Ile Ser Ile Ser Tyr Phe Lys Gln Leu His Thr Pro
                                25
Thr Asn Phe Leu Ile Leu Ser Met Ala Ile Thr Asp Phe Leu Leu Gly
Phe Thr Ile Met Pro Tyr Ser Met Ile Arg Ser Val Glu Asn Cys Trp
                        55
Tyr Phe Gly Leu Thr Phe Cys Lys Ile Tyr Tyr Ser Phe Asp Leu Met
Leu Ser Ile Thr Ser Ile Phe His Leu Cys Ser Val Ala Ile Asp Arg
                85
Phe Tyr Ala Ile Cys Tyr Pro Leu Leu Tyr Ser Thr Lys Ile Thr Ile
                                105
Pro Val Ile Lys Arg Leu Leu Leu Cys Trp Ser Val Pro Gly Ala
                            120
Phe Ala Phe Gly Ala Val Phe Ser Glu Ala Tyr Ala Asp Gly Ile Glu
                        135
                                            140
Gly Tyr Asp Ile Leu Val Ala Cys Ser Ser Ser Cys Pro Val Met Phe
                   150
                                       155
Asn Lys Leu Trp Gly Thr Thr Leu Phe Met Ala Gly Phe Phe Thr Pro
```

```
170
               165
Gly Ser Met Met Val Gly Ile Tyr Gly Lys Ile Phe Ala Val Ser Arg
                             185
                                                190
Lys His Ala His Ala Ile Asn Asn Leu Arg Glu Asn Gln Asn Asn Gln
                       200
                                             205
Val Lys Lys Asp Lys Lys Ala Ala Lys Thr Leu Gly Ile Val Ile Gly
                     215
                                          220
Val Phe Leu Leu Cys Trp Phe Pro Cys Phe Phe Thr Ile Leu Leu Asp
                  230
                                      235
Pro Phe Leu Asn Phe Ser Thr Pro Val Val Leu Phe Asp Ala Leu Thr
                                 250
              245
Trp Phe Gly Tyr Phe Asn Ser Thr Cys Asn Pro Leu Ile Tyr Gly Phe
                    265
           260
Phe Tyr Pro Trp Phe Arg Arg Ala Leu Lys Tyr Ile Leu Leu Gly Lys
               280
     275
Ile Phe Ser Ser Cys Phe His
<210> 2083
<211> 302
<212> PRT
<213> Homo sapien (6911343-1-10351-11487)
<220>
<221> VARIANT
<222> (1)...(302)
<223> Xaa = Any Amino Acid
<400> 2083
Leu Ser Ser Met Cys Leu Thr Ile Val Met His Cys Glu Phe Phe Leu
                                  10
Met Asp Leu Thr Asp Asp Pro Gln Leu His Pro Thr Phe Ser Ala Leu
       20
Phe Leu Pro Ile Tyr Val Val Met Val Met Ala Asn Leu Gly Leu Leu
                          40
Ala Phe Ile Val Val Ser Pro Gln Phe Leu Thr Pro Met Tyr Phe Phe
                   55
Leu Ser Asn Trp Ser Ser Val Asp Phe Cys Tyr Ser Ser Val Thr Val
                  70
                                     75
Pro Lys Ile Ser Met Gly Phe Phe Ser Asp Cys Gln Val Phe Ser Phe
                                  90
              85
Ser Gly Cys Met Ala Gln Leu Ser Cys Phe Xaa Ile Phe Ala Asp Thr
                                                  110
          100
                             105
Glu Phe Phe Leu Leu Ala Ser Met Val Tyr Tyr Arg Xaa Glu Ala Val
                                             125
                          120
Cys Asn Pro Leu Leu Tyr His Ile Thr Met Ser Pro Lys Leu Cys Leu
                                          140
                      135
Gln Leu Val Ala Thr Ser Met Asn Met Val Leu Pro Ser Ser Thr Ile
                  150
                                      155
Phe His Leu Ile Phe Cys Lys Ser Arg Ala Ile Ile His Xaa Phe Cys
                                  170
Tyr Phe Ser Pro Pro Pro Arg Leu Xaa Lys Leu Ser Cys Ser Asp Met
                              185
                                                 190
          180
Gln Gly Leu Gln Leu Leu Thr Phe Ala Ser Ser Ser Phe Asn Val Ser
                                              205
                          200
       195
Val Ser Arg Thr Ile Phe Leu Val Ser Tyr Leu Ile Met Arg Met Pro
                                          220
                       215
Ser Val Xaa Gly Lys His Cys Ala Ser His Leu Thr Ala Val Ser Leu
                            235
                 230
Cys Tyr Gly Thr Thr Val Phe Leu His Leu His Leu Ser Leu Lys Cys
                                  250
```

```
Ser Pro Asp Arg Asp Met Leu Val Ser Val Leu His Ser Ala Ile Leu
                       265
         260
Met Leu Asn Pro Met Val Gln Ser Leu Arg Asn Lys Asp Val Lys Lys
                         280
Thr Phe Gly Thr Ser Ser Xaa Arg Phe Thr Ile Pro Leu Leu
                     295
<210> 2084
<211> 274
<212> PRT
<213> Homo sapien (6911343-1-22015-25112)
<220>
<221> VARIANT
<222> (1) ... (274)
<223> Xaa = Any Amino Acid
<400> 2084
Glu Arg Asn Pro Ser Val Ala Glu Lys Cys Leu Gln Gly Met Thr Asp
                      10
     5
Ser Ser His His Tyr Leu Xaa Leu Arg Leu Pro Leu Phe Arg Leu Leu
                              25
Ile Leu Leu Tyr Thr Ile Ile Thr Ile Gly Asn Leu Gly Thr Val Ile
                                             45
                          40
Leu Ile Gly Ile Ser Leu Gly Leu Tyr Val Cys Pro Pro Arg Phe Leu
                      55
Leu Phe Thr Phe Ser Met Leu Arg Val Leu Val Lys Cys Phe Xaa Ser
                   70
                                      75
Thr Val Leu Pro Phe Ser Phe Trp Ser Leu Glu Ala Gln Ile Asn Phe
                                  90
Phe Ser Ile Leu Cys Ile Thr Glu Phe Phe Pro Leu Ala Thr Met Ala
                              105
           100
Tyr Asp Asp Asn Val Ala Thr Cys Glu Pro Leu Phe His Pro Phe Thr
                          120
Ser Leu Arg Leu Asn Ser Ala Phe Val Xaa Glu Lys Leu Tyr Leu Arg
    130 . 135
                                          140
Ala Phe Thr Ser Ala Leu Pro Ser Thr Leu Pro Phe His Leu Pro Phe
                                     155
                  150
Phe Asn Ser His Leu Cys Ser Leu Gln Xaa His Tyr Phe Leu Gly Gln
                                 170
                                                     175
Val Val Leu Xaa Asn Met Thr Pro Asn Phe Lys Leu Pro Asp Phe Ser
                             185
                                                  190
    180
Asn Ser Asn Val Asn Leu Val Ser Leu Cys Cys Pro Thr Ile Cys Cys
                         200
                                              205
Tyr Pro Ile Ile Leu Arg Ser Leu Ser Ser His Asn Xaa Ser Glu Asn
                                          220
    210 - 215
                           . -
Lys Leu Leu Ile Ile Ile Phe Phe Gln Asn Ser Thr Xaa Leu Leu Phe
                  230
                                      235
Ile Phe Cys Ser Asp Glu Asn Val Tyr Xaa Thr Ile Xaa Gly Ile Thr
               245
                                 250
Asp Xaa Phe Ile Lys Ser Lys His Cys Val His Ile Pro Leu Met Gln
                             265
Ile Leu
<210> 2085
<211> 323
<213> Homo sapien (6911343-1-65670-69060)
<220>
```

```
<221> VARIANT
<222> (1)...(323)
<223> Xaa = Any Amino Acid
<400> 2085
Val Glu Asn Ser Pro Met Val Thr Asp Phe Ile Phe Leu Gly Met Thr
               5
Asp Asn Ser Gln Leu Glu Val Leu Leu Phe Gly Val Phe Leu Ile Ala
                               25
           20
Tyr Ile Ile Thr Val Leu Glu Asn Leu Gly Leu Val Val Leu Ile Arg
                                                45
                           40
Val Ser Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser Asn Gln
                       55
                                           60
Ser Phe Leu Asp Val Cys Phe Ser Ser Ile Thr Ile Pro Gln Asn Leu
                                       75
                   70
Ala His Leu Phe Ser Lys Leu Gln Tyr Val Ser Phe Leu Phe Pro Tyr
                                   90
               85
Thr Xaa Met Ser Leu Phe Val Ile Phe Ala Ser Ala Glu Cys Asn Phe
                               105
                                                   110
           100
Leu Asn Leu Met Ala Tyr Asp Arg Phe Thr Ala Ile Cys His Pro Leu
                                               125
                           120
      115
Phe Tyr His Ile Thr Met Ser Arg Gly His Tyr Leu Phe Leu Val Ala
                       135
                                           140
Gly Cys Tyr Leu Gly Gly Leu Val Lys Met Val Thr Val Thr Thr Ser
                                      155
                   150
Ile Thr Gln Leu Ser Leu Cys Gln Pro Cys Val Leu Pro Ala Phe Phe
                                   170
               165
Cys Asp Ile Pro Ser Leu Leu Val Leu Val Cys Ser Asp Pro Trp Ile
                                                   190
                                185
           180
Thr Ser Ser Ile Leu Val Val Gly Cys Gly Gly Phe Thr Leu Val Thr
                                               205
                           200
       195
Ser Val Val Val Ile Leu Val Ser Tyr Met Ser Ser Leu Met Thr Ile
                                           220
                       215
Leu Gly Ile Pro Leu Ala Ser Gly Lys Gln Arg Ala Phe Ser Thr Cys
                                       235
                   230
Ala Ser His Leu Thr Ala Val Ser Leu Tyr Tyr Glu Thr Thr Met Tyr
                                                       255
                                   250
              245
Thr Tyr Leu Pro Ala Ser Arg His Gly Ser Gly Ala Gly Asn Gln Ile
                                                    270
           260
                                265
Val Ser Val Phe Tyr Thr Met Val Ile Pro Met Leu Asn Pro Leu Ile
                          280
       275
Tyr Ser Leu Arg Asn Glu Glu Val Lys Val Ala Leu Xaa Lys Thr Leu
                                           300
                       295
Arg His Ser Pro Xaa Ser Ser Leu Ser Val Ser Lys Met Gln Asn Ile
                   310
                                       315
Leu Xaa Arg
<210> 2086
<211> 318
<212> PRT
<213> Homo sapien (7024122-10-14004-16338)
<220>
<221> VARIANT
<222> (1)...(318)
<223> Xaa = Any Amino Acid
<400> 2086
Met Lys Ser Glu Leu Asn Arg Asn Tyr Ser Glu Val Thr Glu Phe Ile
```

```
Leu Leu Gly Phe Arg Thr Ser Pro Glu Ala Gln Ile Leu Leu Phe Phe
                                25
Leu Phe Leu Leu Ile Tyr Met Val Ile Val Leu Arg Asn Leu Ser Met
                            40
Leu Val Val Ile Glu Ile Asp Ser Arg Leu His Thr Pro Val Tyr Phe
                       55
Phe Leu Arg Asn Leu Ser Tyr Leu Asp Leu Arg Tyr Ser Thr Val Ile
                   70
Ala Pro Lys Leu Thr Thr Leu Phe Ser Lys Glu Lys Lys Ile Ser Tyr
                                   90
               85
Asn Gly Xaa Ala Thr Gln Leu Phe Phe Phe Ala Leu Phe Val Gly Thr
                               105
           100
Glu Gly Phe Phe Leu Asp Met Met Ala Tyr Asp Arg Phe Ser Ala Ile
                                               125
                           120
        115
Cys Ser Pro Phe Phe Tyr Thr Val Cys Met Ser Gln Gln Ala Cys Val
                       135
                                           140
Cys Leu Val Val Gly Ser Ser Ile Cys Gly Cys Ile Asn Ser Met Ile
                   150
                                       155
Gln Thr Gly Phe Thr Phe Ser Leu His Phe Cys Gly Glu Asn Arg Leu
                                                       175
                                   170
Glu His Phe Phe Cys Asp Val Ser Val Met Ile Lys Ile Ser Cys Ile
                                                    190
                               185
Asp Ile Leu Val Asn Glu Val Val Leu Phe Ile Leu Ser Ala Leu Ile
                                                205
                           200
Thr Thr Thr Thr Val Ile Leu Ala Ser Tyr Val His Ile Leu Ser
                        215
Thr Val Leu Lys Ile Leu Ser Thr His Gly Arg Arg Lys Thr Phe Ser
                                        235
                   230
Thr Cys Ser Ser His Ile Thr Val Val Ser Leu Phe Tyr Gly Thr Val
                                    250
Phe Phe Met Tyr Ala Gln Pro Gly Ala Ile Pro Lys Ser Lys Val Ile
                                265
Val Val Phe Xaa Thr Leu Val Ile Pro Met Leu Asn Thr Leu Ile Tyr
                                               285
                           280
Ser Leu Arg Asn Lys Val Gln Asn Ala Leu Lys Arg Tyr Ile Asp Lys
                      295
Lys Asn Ile Phe His Trp Pro Leu Ala Ile Tyr Lys Thr Ile
                    310
<210> 2087
<211> 318
<212> PRT
<213> Homo sapien (7024122-5-2648-5354)
<400> 2087
Met Phe Ser Ser Glu Pro Thr Ile Asp Gly Asn Gln Ser Leu Cys Ala
                                    10
Lys Phe Thr Phe Val Ala Phe Ser Ser Ile Glu Glu Leu Gln Leu Val
                                25
Leu Phe Ile Val Phe Leu Ile Ile Tyr Leu Cys Thr Ile Gly Gly Asn
Ile Ile Ile Ser Leu Ile Trp Ile Thr Pro Ala Leu His Thr Pro
Met Tyr Phe Phe Leu Val Asn Leu Ser Phe Leu Glu Met Cys Tyr Thr
                    70
Thr Ser Val Val Pro Leu Leu Val His Leu Leu Val Glu Thr Lys Thr
                                    90
Ile Ser Val Gly Gly Cys Ala Thr Gln Met Tyr Ile Phe Ala Ile Leu
                               105
Gly Leu Thr Glu Cys Cys Leu Leu Ala Ala Met Ala Tyr Asp Arg Phe
                            120
        115
```

```
Val Ala Ile Cys Tyr Pro Leu His Tyr Thr Leu Phe Met Gly Pro Arg
                                          140
                       135
Val Cys Leu Lys Leu Ala Ala Ala Ser Trp Phe Thr Gly Val Val Val
                                       155
                   150
Glu Ser Ala Gln Ile Thr Leu Ile Phe Thr Leu Pro Phe Cys Gly Thr
                                   170
               165
Gly Lys Ile Pro Thr Leu Phe Cys Asp Ile Met Pro Val Leu Lys Leu
                                                   190
                               185
           180
Ala Cys Ile Asp Thr Ser Gln Ile Glu Ile Val Met Phe Ser Leu Ser
        195
                            200
                                               205
Val Leu Phe Ile Val Ser Pro Cys Phe Leu Ile Leu Cys Ser His Met
                                           220
                       215
His Ile Pro Val Thr Ile Leu Arg Ile Pro Ser Ala Ala Gly Arg His
                                       235
                   230
Lys Ala Phe Ser Thr Cys Ser Ser His Ile Leu Val Val Ser Leu Phe
               245
                                   250
Tyr Gly Thr Ala Leu Phe Thr Tyr Leu Gln Pro Lys Thr Ala His Thr
                               265
                                                  270
Pro Glu Thr Asp Lys Ala Thr Ala Leu Met Tyr Thr Met Val Thr Pro
                           280
                                               285
        275
Ala Leu Asn Pro Val Ile Tyr Thr Leu Arg Asn Lys Glu Val Lys Glu
                       295
Ala Phe Gln Arg Ile Thr Gln Arg Asn Ser Leu Arg Gln Thr
                   310
<210> 2088
<211> 317
<212> PRT
<213> Homo sapien (7024122-6-11866-14009)
<220>
<221> VARIANT
<222> (1)...(317)
<223> Xaa = Any Amino Acid
Met Gly Asp Lys Gly Thr Gly Asn His Ser Asp Val Thr Asp Phe Ile
                                   10
Leu Glu Gly Phe Arg Val Arg Pro Glu Phe Tyr Ile Leu Leu Phe Phe
                               25
Leu Phe Leu Leu Ile Tyr Ser Met Val Leu Leu Gly Asn Ile Ser Val
                                               45
                           40
Met Thr Ile Ile Val Thr Asp Ser Gln Leu Asn Thr Pro Met Tyr Phe
                                           60
                      55
Phe Leu Gly Asn Leu Ser Phe Ile Asp Val Ser Tyr Ser Thr Val Ile
                                       75
Ala Pro Lys Ala Met Ala His Phe Leu Ser Glu Lys Lys Thr Val Ser
                                   90
                85
Phe Ala Gly Cys Val Ala Gln Leu Phe Leu Phe Ala Leu Phe Ile Val
                               105
           100
Thr Glu Gly Phe Val Leu Ala Ala Met Ala Tyr Asp Arg Phe Ser Ala
                                           1 125
                           120
Ile Cys Asn Pro Leu Leu His Ser Val His Met Ser Arg Arg Leu Cys
                       135
                                           140
Thr Gln Leu Val Ala Gly Ser Tyr Phe Cys Gly Trp Ala Ser Ser Ile
                                       155
                   150
Leu Gln Val Ser Val Thr Phe Ser Val Ser Phe Cys Ala Ser Arg Val
                                   170
              165
Ile Ala His Phe Tyr Cys Asp Ser Tyr Gln Ile Glu Lys Ile Ser Cys
                               185
                                                  190
           180
Ser Asn Leu Phe Val Asn Lys Met Val Ser Leu Ser Leu Ser Val Ile
```

```
200
                                                205
 Ile Ile Leu Pro Thr Ile Val Val Ile Ile Val Ser Tyr Leu Tyr Ile
                        215
                                            220
Val Ser Ser Val Leu Lys Ile Pro Ser Ser Glu Gly Arg Lys Lys Asp
                                        235
                   230
 Phe Ser Thr Cys Ser Ser His Arg Gly Val Val Ser Leu Leu Xaa Gly
                245
                                   250
 Thr Val Ser Phe Val Tyr Leu Thr Pro Pro Ser Asn Pro Glu Leu Arg
                                265
            260
 Lys Val Ala Ser Val Phe Tyr Ile Cys Val Thr Pro Met Leu Asn Pro
                            280
 Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Leu Arg Lys
                                            300
                       295
 Ile Leu Cys Asn Lys Lys Ala Leu Ser Xaa Phe Tyr Phe
                   310
 <210> 2089
 <211> 315
 <212> PRT
 <213> Homo sapien (7107785-12-32121-33524)
 <400> 2089
 Met Ser Pro Asp Gly Asn His Ser Ser Asp Pro Thr Glu Phe Val Leu
                                    10
 Ala Gly Leu Pro Asn Leu Asn Ser Ala Arg Val Glu Leu Phe Ser Val
                                25
 Phe Leu Leu Val Tyr Leu Leu Asn Leu Thr Gly Asn Val Leu Ile Val
                            40
. Gly Val Val Arg Ala Asp Thr Arg Leu Gln Thr Pro Met Tyr Phe Phe
                        55
 Leu Gly Asn Leu Ser Cys Leu Glu Ile Leu Leu Thr Ser Val Ile Ile
                    70
 Pro Lys Met Leu Ser Asn Phe Leu Ser Arg Gln His Thr Ile Ser Phe
                                    90
 Ala Ala Cys Ile Thr Gln Phe Tyr Phe Tyr Phe Phe Leu Gly Ala Ser
                                105
 Glu Phe Leu Leu Leu Ala Val Met Ser Ala Asp Arg Tyr Leu Ala Ile
                                                125
                            120
 Cys His Pro Leu Arg Tyr Pro Leu Leu Met Ser Gly Ala Val Cys Phe
                                            140
                        135
 Arg Val Ala Leu Ala Cys Trp Val Gly Gly Leu Val Pro Val Leu Gly
                                        155
                   150
 Pro Thr Val Ala Val Ala Leu Leu Pro Phe Cys Lys Gln Gly Ala Val
                                    170
                165
 Val Gln His Phe Phe Cys Asp Ser Gly Pro Leu Leu Arg Leu Ala Cys
                                185
            180
 Thr Asn Thr Lys Lys Leu Glu Glu Thr Asp Phe Val Leu Ala Ser Leu
                                                205
                            200
 Val Ile Val Ser Ser Leu Leu Ile Thr Ala Val Ser Tyr Gly Leu Ile
                                            220
                        215
 Val Leu Ala Val Leu Ser Ile Pro Ser Ala Ser Gly Arg Gln Lys Ala
                                        235
                    230
 Phe Ser Thr Cys Thr Ser His Leu Ile Val Val Thr Leu Phe Tyr Gly
                                  250
                245
 Ser Ala Ile Phe Leu Tyr Val Arg Pro Ser Gln Ser Gly Ser Val Asp
                                265
            260
 Thr Asn Trp Ala Val Thr Val Ile Thr Thr Phe Val Thr Pro Leu Leu
                                                285
                            280
 Asn Pro Phe Ile Tyr Ala Leu Arg Asn Glu Gln Val Lys Glu Ala Leu
                        295
 Lys Asp Met Phe Arg Lys Val Val Ala Gly Val
```

```
310
                                        315
305
<210> 2090
<211> 141
<212> PRT
<213> Homo sapien (7107785-6-1204-2472)
<220>
<221> VARIANT
<222> (1)...(141)
<223> Xaa = Any Amino Acid
<400> 2090
Arg Asn Ile Arg Ile Ser Leu Pro Ile Tyr Phe Leu Ser Val Xaa Glu
                                    10
Glu Arg Phe Gly Arg Glu Glu Phe Leu Arg Val Trp Thr Tyr Xaa Leu
                                                    30
           20
                                25
Ile Ser Met Arg Asn Cys Phe Leu Arg Gly Cys Leu Met Tyr Xaa Met
                            40
       35
Ile Phe Ser Trp Ser Cys Thr Glu Tyr Val Val His Met Phe Phe Ser
                                            60
                        55
Leu Leu Asn Ser Gly Ile Ser Thr Glu Cys Gln Ile Ser Tyr Gln Gln
                   70
                                        75
Asn Lys Asp Ile Ala Ile Phe Phe Leu His Asn Leu Xaa Xaa Lys Glu
                                    90
               85
Asn Phe Glu Ile Phe Leu Tyr Glu Asp Tyr Cys Ser His Ile Arg Asp
                                105
                                                    110
            100
Leu Thr Lys Ile Ser Leu Gly Glu Ala Gly Xaa Asn Tyr Xaa Gly Lys
       115
                            120
Ser Thr Thr Ile Glu Phe Leu Phe Leu Ala Leu Leu Phe
                        135
   130
<210> 2091
<211> 202
<212> PRT
<213> Homo sapien (7134787-10-3417-6169)
<220>
<221> VARIANT
<222> (1)...(202)
<223> Xaa = Any Amino Acid
<400> 2091
Ile Phe Ala Ile Leu Thr Thr Ile Asp Cys Cys Val Phe Val Trp Glu
            5
                                   10
Phe Leu Glu Cys Thr Val Phe Val Asn Lys Arg Ala Cys Ala Gln Leu
                                25
           20
Ala Cys Gly Ala Phe Cys Ile Gly Leu Ile Met Thr Val Val Xaa Ile
                            40
Thr Thr Val Ser Gln Arg Tyr Lys Arg Ser Thr Tyr Ala Ile Val Asp
                       55
                                            60
Cys Phe Leu Phe Asp Thr Leu Leu Val Met Lys Leu Ser Cys Ile Asp
                                        75
Asn Thr Ile Tyr Glu Ile Ile Gln Tyr Phe Ile His His Thr Cys Val
                                                        95
                                    90
Gln Val Ser Met Gly Leu Val Cys Ile Ser Tyr Ile Asp Ile Pro Val
                                                    110
           100
                                105
Thr Ser Ile Val Leu Arg Ile Ser Xaa Ser Glu Val Phe Ala Thr Cys
                                                125
      115
                           120
Val Pro Gln Pro Pro Pro His His Gly His Cys Leu Tyr Val Cys Ala
                       135
                                            140
```

```
Cys Thr Ala Tyr Leu Lys His Lys Pro Met Asn Ser Ile Glu Lys Gly
                                      155
            150
Leu Leu Xaa Glu Thr Tyr Ile Ile Ile Ile His Ser Ala Ser Gly Pro
                                   170
               165
Val Val Tyr Thr Leu Arg Tyr Met Glu Ala Lys Asp Thr Met Tyr Arg
                              185
           180
Ala Val Asp Arg Asn Ile Ser Xaa Gln Ile
<210> 2092
<211> 276
<212> PRT
<213> Homo sapien (7134787-7-358-5219)
<400> 2092
Met Arg Arg Lys Asn Leu Thr Glu Val Thr Glu Phe Val Phe Leu Gly
                                   10
                5
Phe Ser Arg Phe His Lys His His Ile Thr Leu Phe Val Val Phe Leu
                                25
            20
Ile Leu Tyr Thr Leu Thr Val Ala Gly Asn Ala Ile Ile Met Thr Ile
                            40
    35
Ile Cys Ile Asp Arg His Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                        55
                                           60
Met Leu Ala Ser Ser Lys Thr Val Tyr Thr Leu Phe Ile Ile Pro Gln
                   70
                                        75
Met Leu Ser Ser Phe Val Thr Gln Thr Gln Pro Ile Ser Leu Ala Gly
                85
                                    90
Cys Thr Thr Gln Thr Phe Phe Phe Val Thr Leu Ala Ile Asn Asn Cys
                                105
            100
Phe Leu Leu Thr Val Met Gly Tyr Asp His Tyr Met Ala Ile Cys Asn
                            120
Pro Leu Arg Tyr Arg Val Ile Thr Ser Lys Lys Val Cys Val Gln Leu
                                           140
                       135
Val Cys Gly Ala Phe Ser Ile Gly Leu Ala Met Ala Ala Val Gln Val
                    150
                                        155
Thr Ser Ile Phe Thr Leu Pro Phe Cys His Thr Val Val Gly His Phe
                                                        175
                                   170
Phe Cys Asp Ile Leu Pro Val Met Lys Leu Ser Cys Ile Asn Thr Thr
                               185
Ile Asn Glu Ile Ile Asn Phe Val Val Arg Leu Phe Val Ile Leu Val
                                                205
                            200
Pro Met Gly Leu Val Phe Ile Ser Tyr Val Leu Ile Ile Ser Thr Val
                                            220
                       215
Leu Lys Ile Ala Ser Ala Glu Gly Trp Lys Lys Thr Phe Ala Thr Cys
                                        235
                    230
Ala Phe His Leu Thr Val-Val Ile Val-His Tyr Gly Cys Ala Ser Ile
                                   250
                245
Ala Tyr Leu Met Pro Lys Ser Glu Asn Ser Ile Glu Gln Asp Leu Leu
                               265
Leu Ser Val Thr
        275
<210> 2093
<211> 310
<212> PRT
<213> Homo sapien (7139676-7-1545-4565)
<400> 2093
Met Gln Leu Asn Asn Asn Val Thr Glu Phe Ile Leu Leu Gly Leu Thr
                                    10
Gln Asp Pro Phe Trp Lys Lys Ile Val Phe Val Ile Phe Leu Arg Leu
```

```
20
                                25
 Tyr Leu Gly Thr Leu Leu Gly Asn Leu Leu Ile Ile Ser Val Lys
                            40
 Ala Ser Gln Ala Leu Lys Asn Pro Met Phe Phe Leu Phe Tyr Leu
 Ser Leu Ser Asp Thr Cys Leu Ser Thr Ser Ile Ala Pro Arg Met Ile
                    70
 Val Asp Ala Leu Leu Lys Lys Thr Thr Ile Ser Phe Ser Glu Cys Met
                85
                                    90
 Ile Gln Val Phe Ser Ser His Val Phe Gly Cys Leu Glu Ile Phe Ile
            100
                                105
 Leu Ile Leu Thr Ala Val Asp Arg Tyr Val Asp Ile Cys Lys Pro Leu
                           120
                                                125
His Tyr Met Thr Ile Ile Ser Gln Trp Val Cys Gly Val Leu Met Ala
                        135
                                           140
Val Ala Trp Val Gly Ser Cys Val His Ser Leu Val Gln Ile Phe Leu
                    150
                                       155
Ala Leu Ser Leu Pro Phe Cys Gly Pro Asn Val Ile Asn His Cys Phe
                165
                                   170
Cys Asp Leu Gln Pro Leu Leu Lys Gln Ala Cys Ser Glu Thr Tyr Val
            180
                               185
Val Asn Leu Leu Val Ser Asn Ser Gly Ala Ile Cys Ala Val Ser
                            200
                                                205
Tyr Val Met Leu Ile Phe Ser Tyr Val Ile Phe Leu His Ser Leu Arg
                        215
                                            220
Asn His Ser Ala Glu Val Ile Lys Lys Ala Leu Ser Thr Cys Val Ser
                    230
                                        235
His Ile Ile Val Val Ile Leu Phe Phe Gly Pro Cys Ile Phe Met Tyr
                245
                                    250
Thr Cys Pro Ala Thr Val Phe Pro Met Asp Lys Met Ile Ala Val Phe
                               265
                                                    270
Tyr Thr Val Gly Thr Ser Phe Leu Asn Pro Val Ile Tyr Thr Leu Lys
                           280
Asn Thr Glu Val Lys Ser Ala Met Arg Lys Leu Trp Ser Lys Leu
                       295
Ile Thr Asp Asp Lys Arg
<210> 2094
<211> 311
<212> PRT
<213> Homo sapien (7139676-9-1-2285)
<400> 2094
Met Glu Lys Ser Asn Asn Ser Thr Leu Phe Ile Leu Leu Gly Phe Ser
                                   10
Gln Asn Lys Asn Ile Glu Val Leu Cys Phe Val Leu Phe Leu Phe Cys
                               25
Tyr Ile Ala Ile Trp Met Gly Asn Leu Leu Ile Met Ile Ser Ile Thr
                           40
Cys Thr Gln Leu Ile His Gln Pro Met Tyr Phe Phe Leu Asn Tyr Leu
                       55
                                           60
Ser Leu Ser Asp Leu Cys Tyr Thr Ser Thr Val Thr Pro Lys Leu Met
                   70
                                       75
Val Asp Leu Leu Ala Glu Arg Lys Thr Ile Ser Tyr Asn Asn Cys Met
Ile Gln Leu Phe Thr Thr His Phe Phe Gly Gly Ile Glu Ile Phe Ile
           100
                               105
                                                   110
Leu Thr Gly Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                           120
                                               125
His Tyr Thr Ile Ile Met Ser Arg Gln Lys Cys Asn Thr Ile Ile Ile
```

```
140
                       135
Val Cys Trp Thr Gly Gly Phe Ile His Ser Ala Ser Gln Phe Leu Leu
                                      155
                   150
Thr Ile Phe Val Pro Phe Cys Gly Pro Asn Glu Ile Asp His Tyr Phe
               165
                                   170
Cys Asp Val Tyr Pro Leu Leu Lys Leu Ala Cys Ser Asn Ile His Met
           180
                               185
Ile Gly Leu Leu Val Ile Ala Asn Ser Gly Leu Ile Ala Leu Val Thr
                           200
Phe Val Val Leu Leu Ser Tyr Val Phe Ile Leu Tyr Thr Ile Arg
                       215
Ala Tyr Ser Ala Glu Arg Arg Ser Lys Ala Leu Ala Thr Cys Ser Ser
                   230
                                       235
His Val Ile Val Val Leu Phe Phe Ala Pro Ala Leu Phe Ile Tyr
               245
                                   250
Ile Arg Pro Val Thr Thr Phe Ser Glu Asp Lys Val Phe Ala Leu Phe
           260
                               265
Tyr Thr Ile Ile Ala Pro Met Phe Asn Pro Leu Ile Tyr Thr Leu Arg
       275
                       280
                                              285
Asn Thr Glu Met Lys Asn Ala Met Arg Lys Val Trp Cys Cys Gln Ile
                      295
Leu Leu Lys Arg Asn Gln Leu
<210> 2095
<211> 319
<212> PRT
<213> Homo sapien (7144617-1-1-995)
<400> 2095
Met Ala Pro Thr Asn Leu Thr Ser Ala Pro Val Phe Leu Leu Gly
                                  10
               5
Leu Val Thr Glu Gln Thr Asp Ala His Pro Leu Leu Phe Leu Leu Cys
                               25
Leu Gly Ile Tyr Leu Leu Asn Ala Leu Ser Asn Leu Ser Met Val Ala
Leu Val Arg Ser Asp Gly Ala Leu Arg Ser Pro Met Tyr Tyr Phe Leu
                       55
Gly His Leu Ser Leu Val Asp Val Cys Phe Thr Thr Val Thr Val Pro
                   70
Arg Leu Leu Ala Gly Leu Leu His Pro Gly Gln Ala Ile Ser Phe Gln
                                   90
Ala Cys Phe Ala Glu Met Tyr Phe Phe Val Ala Leu Gly Ile Thr Glu
                               105
Ser Tyr Leu Pro Ala Ala Met Ser Tyr Asp Arg Ala Thr Ala Ala Cys
                           120
Arg Pro Leu Arg Tyr Gly Ala Leu Val Thr His Gly Arg Cys Ala Ser
                      135
                                          140
Leu Val Arg Ala Ser Trp Ala Val Thr His Leu His Ser Leu Leu His
                   150
                                      155
Thr Leu Leu Ser Ala Leu Ser Tyr Pro Tyr Pro Thr Pro Val Arg
               165
                                  170
Pro Phe Phe Cys Asp Met Thr Val Met Leu Ser Leu Ala Thr Ser Asp
                               185
           180
Thr Ser Ala Ala Glu Thr Ala Ile Phe Ser Glu Gly Leu Ala Val Val
                           200
Leu Ala Pro Leu Leu Val Phe Leu Ser Tyr Ala Arg Ile Leu Val
                       215
                                          220
Ala Val Leu Gly Leu Pro Arg Pro Arg Arg Ala Phe Ser Thr Cys Gly
               230
                                      235
Ala His Leu Val Ala Val Ala Val Ala Leu Phe Phe Gly Ser
```

```
250
               245
Val Leu Ser Val Tyr Phe Pro Pro Ser Ser Ala Tyr Ser Ala Arg Tyr
                               265
Asp Arg Leu Ala Ser Val Val Tyr Ala Val Ile Thr Pro Thr Leu Asn
                           280
                                               285
Pro Phe Ile Asn Ser Leu Arg Asn Lys Glu Val Lys Gly Ala Leu Lys
                                          300
            295
Arg Gly Leu Arg Trp Arg Ala Ala Pro Gln Glu Ala Trp Arg Ala
                  310
<210> 2096
<211> 316
<212> PRT
<213> Homo sapien (7144637-1-1-993)
<220>
<221> VARIANT
<222> (1)...(316)
<223> Xaa = Any Amino Acid
<400> 2096
Leu Leu Glu Gly Gly Asn Gln Thr Ser Thr Phe Glu Phe Leu Leu Trp
Gly Leu Ser Asp Gln Pro Gln Gln Gln His Ile Phe Phe Leu Leu Phe
                               25
Leu Trp Met Tyr Val Val Thr Val Ala Gly Asn Leu Leu Ile Val Leu
                           40
Ala Ile Gly Thr Asp Thr His Leu His Thr Pro Met Tyr Phe Phe Leu
                                           60
                       55
Ala Ser Leu Ser Cys Ala Asp Ile Phe Ser Thr Ser Thr Thr Val Pro
                   70
                                       75
Lys Ala Leu Val Asn Ile Gln Thr Gln Ser Arg Ser Ile Ser Tyr Ala
                                   90
Gly Cys Leu Ala Gln Leu Tyr Phe Phe Leu Thr Phe Gly Asp Met Asp
                              105
                                                  110
          100
Ile Phe Leu Pro Ala Thr Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys
                                              125
                          120
His Leu Leu His Tyr Met Met Ile Met Ser Leu His Arg Cys Ala Phe
                      135
                                          140
Leu Val Thr Ala Cys Trp Thr Leu Thr Ser Leu Leu Ala Met Thr Arg
                  150
                                       155
Thr Phe Leu Ile Phe Arg Leu Ser Leu Cys Ser Xaa Ile Leu Pro Gly
                                   170
Phe Phe Cys Asp Leu Gly Pro Leu Met Lys Val Ser Cys Ser Asp Ala
                               185
           180
Gln Val Asn Glu Leu Val Leu Leu Phe Leu Gly Gly Ala Val Ile Leu
                          200
Ile Pro Phe Met Leu Ile Leu Val Ser Tyr Ile Arg Ile Val Ser Ala
                      215
Ile Leu Arg Ala Pro Ser Ala Gln Gly Arg Arg Lys Ala Phe Ser Thr
                  230
                                       235
Cys Asp Ser His Leu Val Val Val Ala Leu Phe Phe Gly Thr Val Ile
               245
                                  250
Arg Ala Tyr Leu Cys Pro Ser Ser Ser Ser Ser Ser Val Lys Glu
                                                   270
                              265
          260
Asp Thr Ala Ala Ala Val Met Tyr Thr Val Val Thr Pro Leu Leu Asn
                                              285
       275
                           280
Pro Phe Ile Tyr Ser Met Arg Asn Lys Asp Met Lys Ala Ala Val Val
                      295
                                          300
Arg Leu Leu Lys Gly Arg Val Ser Phe Ser Gln Gly
                  310
```

```
<210> 2097
<211> 247
<212> PRT
<213> Homo sapien (7144976-1-1-1194)
<220>
<221> VARIANT
<222> (1)...(247)
<223> Xaa = Any Amino Acid
<400> 2097
Met Gly Asn Ile Asn Ile Ser Leu Glu Asn Tyr Phe Ile Leu Leu Gly
                                   10
Leu Ser Asn Xaa Pro Pro Leu Glu Ile Val Ile Phe Val Val Leu Leu
                                25
Ile Phe Cys Phe Met Thr Leu Ile Gly Lys Leu Phe Ser Ile Ile Leu
                            40
Ser Tyr Leu Asp Ser His Pro His Thr Pro Arg Tyr Leu Phe Ser Phe
                       55
                                            60
Leu Asp Phe Cys Tyr Thr Ile Ser Ser Ile Phe Xaa Leu Gln Tyr Asn
                   70
Leu Trp Gly Pro Gln Lys Asn Ile Ser Tyr Ala Ser Gly Met Ile Gln
                                   90
Ile Tyr Phe Val Leu Thr Leu Gly Thr Met Asp Cys Ala Leu Leu Val
                                105
                                                   110
           100
Val Met Ser Arg Thr Val Tyr Ala Ala Gly His Arg His Leu Pro Tyr
                            120
                                                125
Thr Val Val Met Ala Val Ala Phe Trp Val Ser Ser Phe Thr Asn Ser
                        135
Ala Phe Asp Ser Phe Phe Thr Phe Trp Val Thr Leu Cys Gly His His
                    150
                                        155
Tyr Tyr Ala Tyr Ile Phe Ile Phe Thr Ser Leu Leu Val Xaa Arg Trp
                                    170
                                                        175
Phe Ile Asn Arg Lys Lys Gln Ser Val Phe Ser Leu Asn His Ala Ala
                                                   190
            180
                                185
Leu Leu Thr Leu Ser Phe Pro Leu Xaa Asn Asp Cys Phe Gln Glu Ile
                            200
                                                205
Glu Lys Asn Met Leu Arg Lys His Ser Ile Gly Glu Cys Xaa Lys His
                       215
                                            220
Val Met Leu Val Gln Leu Asn Gln Val Ser Lys Thr Cys Ile Phe Met
                   230
Arg Pro Ile Leu Gly Asn Ser
                245
<210> 2098
<211> 329
<212> PRT
<213> Homo sapien (7145001-12-25597-26388)
<220>
<221> VARIANT
<222> (1)...(329)
<223> Xaa = Any Amino Acid
<400> 2098
Lys Ser Met Lys Lys Met Asn Asn Val Ile Glu Phe Ile Leu Leu Gly
                                    10
Leu Thr His Asn Pro Glu Leu Gln Lys Phe Leu Phe Val Met Phe Leu
                                25
                                                    30
Ile Thr Tyr Leu Ile Thr Leu Ala Gly Asn Leu Phe Ile Ser Val Ile
```

```
40
Ile Phe Ile Ser Pro Ala Leu Gly Ser Pro Met Tyr Ser Phe Pro Ser
                       55
                                           60
Tyr Leu Phe Ile Ile Asp Ile Phe Cys Ser Ser Ile Ala Pro Lys
                                       75
                   70
Met Asn Phe Asp Leu Ile Ser Glu Lys Asn Thr Ile Ser Phe Asn Gly
                                   90
Cys Met Thr Gln Leu Phe Thr Glu His Phe Phe Thr Glu His Phe Phe
                              105
Glu Ala Ala Glu Ile Ile Leu Leu Ser Val Met Ala Tyr Asp His Tyr
                          120
                                               125
Val Ala Ile Arg Lys Pro Leu His Tyr Ala Thr Ile Met Ser Gln Pro
                       135
Met Cys Gly Phe Leu Met Val Val Ala Gly Ile Leu Gly Phe Val His
                   150
                                       155
Gly Gly Ile Gln Thr Leu Phe Ile Ala Gln Leu Pro Phe Cys Gly Pro
                                   170
               165
Asn Val Ile Asn His Phe Met Cys Asp Leu Val Pro Leu Leu Glu Leu
           180
                               185
Ala Cys Thr Asp Thr His Thr Leu Gly Pro Leu Ile Ala Ala Asn Ser
                           200
                                              205
Gly Ser Leu Cys Phe Leu Ile Phe Ser Met Leu Val Ala Ser Tyr Val
                      215
                                           220
Ile Ile Leu Cys Phe Leu Arg Thr His Ser Ser Glu Gly Arg Arg Lys
                   230
                                       235
Ala Leu Ser Ser Cys Ala Ser His Ile Phe Ile Val Ile Leu Phe Phe
               245
                                   250
Val Pro Phe Ser Tyr Leu Tyr Leu Arg Pro Ile His Ser Phe Pro Thr
                               265
           260
Asp Lys Ala Val Thr Val Phe Cys Thr Leu Phe Thr Pro Met Leu Asn
                           280
Pro Leu Ile Tyr Thr Leu Lys Asn Lys Glu Val Lys Asn Val Ile Lys
                                           300
                       295
Lys Leu Trp Lys Gln Ile Met Thr Thr Asp Asp Lys Xaa Val Leu Xaa
                                . 315
                   310
His Lys His Leu Gly Lys Asn Ile Trp
               325
```

<210> 2099

<211> 264

<212> PRT

<213> Homo sapien (7145001-12-45102-50811)

<400> 2099

Met Val Asp Asn Leu Ile Ile Val Val Thr Ile Thr Thr Ser Pro Ala 10 Leu Asp Ser Pro Val Tyr Phe Phe Leu Ser Phe Phe Ser Phe Ile Asp 20 25 Gly Cys Ser Ser Ser Thr Met Ala Pro Lys Met Ile Phe Asp Leu Leu 40 Thr Glu Lys Lys Thr Ile Ser Phe Ser Gly Cys Met Thr Gln Leu Phe 55 Val Glu His Phe Phe Gly Gly Val Glu Ile Ile Leu Leu Val Val Met 70 75 Ala Tyr Asp Cys Tyr Val Ala Ile Cys Lys Pro Leu Tyr Tyr Leu Ile 90 85 Thr Met Asn Arg Gln Val Cys Gly Leu Leu Val Ala Met Ala Trp Val 105 100 Gly Gly Phe Leu His Ala Leu Ile Gln Met Leu Leu Ile Val Trp Leu 120 125 Pro Phe Cys Gly Pro Asn Val Ile Asp His Phe Ile Cys Asp Leu Phe

```
135
                                            140
    130
Pro Leu Leu Lys Leu Ser Cys Thr Asp Thr His Val Phe Gly Leu Phe
                   150
                                       155
Val Ala Ala Asn Ser Gly Leu Met Cys Met Leu Ile Phe Ser Ile Leu
                165
                                   170
Ile Thr Ser Tyr Val Leu Ile Leu Cys Ser Gln Arg Lys Ala Leu Ser
                                                  190
            180
                               185
Thr Cys Ala Phe His Ile Thr Val Val Val Leu Phe Phe Val Pro Cys
                           200
                                               205
        195
Ile Leu Val Tyr Leu Arg Pro Met Ile Thr Phe Pro Ile Asp Lys Ala
                       215
Val Ser Val Phe Tyr Thr Val Val Thr Pro Met Leu Asn Pro Leu Ile
                   230
                                       235
Tyr Thr Leu Arg Asn Thr Glu Val Lys Asn Ala Met Lys Gln Leu Trp
               245
                                   250
Ser Gln Ile Ile Trp Gly Asn Asn
            260
<210> 2100
<211> 309
<212> PRT
<213> Homo sapien (7145001-8-11112-14684)
<400> 2100
Met Gly Ala Lys Asn Asn Val Thr Glu Phe Val Leu Phe Gly Leu Phe
                                   10
Glu Ser Arg Glu Met Gln His Thr Cys Phe Val Val Phe Phe Leu Phe
                               25
His Val Leu Thr Val Leu Gly Asn Leu Leu Val Ile Ile Thr Ile Asn
     35
                           40
Ala Arg Lys Thr Leu Lys Ser Pro Met Tyr Phe Phe Leu Ser Gln Leu
                       55
Ser Phe Ala Asp Ile Cys Tyr Pro Ser Thr Thr Ile Pro Lys Met Ile
65
                   70
                                       75
Ala Asp Thr Phe Val Glu His Lys Ile Ile Ser Phe Asn Gly Cys Met
                                   90
                85
Thr Gln Leu Phe Ser Ala His Phe Phe Gly Gly Thr Glu Ile Phe Leu
                               105
Leu Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Arg Pro Leu
                          120
                                               125
His Tyr Thr Ala Ile Met Asp Cys Arg Lys Cys Gly Leu Leu Ala Gly
                       135
                                           140
Ala Ser Trp Leu Ala Gly Phe Leu His Ser Ile Leu Gln Thr Leu Leu
                   150
                                       155
Thr Val Gln Leu Pro Phe Cys Gly Pro Asn Glu Ile Asp Asn Phe Phe
               165 ·
                                   170
Cys Asp Val His Pro Leu Leu Lys Leu Ala Cys Ala Asp Thr Tyr Met
                                                   190
           180
                               185
Val Gly Leu Ile Val Val Ala Asn Ser Gly Met Ile Ser Leu Ala Ser
                           200
Phe Phe Ile Leu Ile Ile Ser Tyr Val Ile Ile Leu Leu Asn Leu Arg
                                           220
Ser Gln Ser Ser Glu Asp Arg Lys Ala Val Ser Thr Cys Gly Ser
                   230
                                       235
His Val Ile Thr Val Leu Leu Val Leu Met Pro Pro Met Phe Met Tyr
                                   250
               245
Ile Arg Pro Ser Thr Thr Leu Ala Ala Asp Lys Leu Ile Ile Leu Phe
           260
                               265
                                                   270
Asn Ile Val Met Pro Pro Leu Leu Asn Pro Leu Ile Tyr Thr Leu Arg
                           280
```

Asn Asn Asp Val Lys Asn Ala Met Arg Lys Leu Phe Arg Val Lys Arg

```
300
                        295
 Ser Leu Gly Glu Lys
 305
 <210> 2101
 <211> 296
 <212> PRT
 <213> Homo sapien (7145013-16-7265-9434)
<400> 2101
Leu Leu Leu Val Leu Leu Pro Thr Phe Leu Leu Ser Leu Met
 1
        5
                            10
Gly Asn Met Leu Ile Ile Ser Thr Val Leu Ser Cys Ser Arg Leu His
            20
                                25
Thr Pro Met Tyr Phe Phe Leu Cys Asn Leu Ser Ile Leu Asp Ile Leu
                            40
Phe Thr Ser Val Ile Ser Pro Lys Val Leu Ala Asn Leu Gly Ser Arg
                        55 .
Asp Lys Thr Ile Ser Phe Ala Gly Cys Ile Thr Gln Cys Tyr Phe Tyr
                    70
                                        75
Phe Phe Leu Gly Thr Val Glu Phe Leu Leu Leu Thr Val Met Ser Tyr
                                   90
Asp Cys Tyr Ala Ala Ile Cys Cys Pro Leu Arg Tyr Thr Thr Ile Met
           100
                               105
                                                   110
Arg Pro Tyr Val Cys Ile Gly Thr Val Val Phe Ser Trp Val Gly Gly
                           120
                                               125
Phe Leu Ser Val Leu Phe Pro Thr Ile Leu Ile Ser Gln Leu Pro Phe
                       135
Cys Gly Ser Asn Ile Ile Asn His Phe Phe Cys Asp Ser Gly Pro Leu
                   150
                                       155
Leu Ala Leu Ala Cys Ala Asp Thr Thr Ala Ile Glu Leu Met Asp Phe
               165
                                   170
Met Leu Ser Ser Met Val Ile Leu Cys Cys Ile Val Leu Val Ala Tyr
           180
                               185
                                                   190
Ser Tyr Thr Tyr Ile Ile Leu Thr Ile Met Arg Ile Pro Ser Ala Ser
      195
                           200
Gly Arg Lys Lys Ala Phe Asn Thr Cys Ala Ser His Leu Thr Ile Val
                       215
                                           220
Ile Ile Ser Ser Gly Ile Thr Val Phe Ile Tyr Val Thr Pro Ser Gln
                   230
                                       235
Lys Glu Tyr Leu Glu Ile Asn Lys Ile Pro Ser Val Leu Ser Ser Leu
               245
                                   250
Val Thr Pro Phe Leu Asn Pro Phe Ile Tyr Thr Leu Arg Asn Asp Thr
                              265
Val Gln Gly Val Leu Arg Asp Val Trp Val Arg Val Arg Gly Val Phe
     275
                           280
Glu Lys Arg Met Arg Ala Val Leu
    290
<210> 2102
<211> 162
<212> PRT
<213> Homo sapien (7211526-1-1-487)
<400> 2102
Val Ala Ile Cys Asn Pro Leu Leu Tyr Pro Val Met Met Ser Asn Lys
               5
                                   10
Leu Ser Ala Gln Leu Leu Ser Ile Ser Tyr Val Ile Gly Phe Leu His
                               25
Pro Leu Val His Val Ser Leu Leu Leu Arg Leu Thr Phe Cys Arg Phe
                . 40
```

290

```
Asn Ile Ile His Tyr Phe Tyr Cys Glu Ile Leu Gln Leu Phe Lys Ile
                        55
Ser Cys Asn Gly Pro Ser Ile Asn Ala Leu Ile Ile Phe Ile Phe Gly
                    70
Ala Phe Ile Gln Ile Pro Thr Leu Met Thr Ile Ile Ile Ser Tyr Thr
                                    90
Arg Val Leu Phe Asp Ile Leu Lys Lys Ser Glu Lys Gly Arg Ser
           100
                               105
                                                   110
Lys Ala Phe Ser Thr Cys Gly Ala His Leu Leu Ser Val Ser Leu Tyr
                           120
                                                125
Tyr Gly Thr Leu Ile Phe Met Tyr Val Arg Pro Ala Ser Gly Leu Ala
                       135
Glu Asp Gln Asp Lys Val Tyr Ser Leu Phe Tyr Thr Ile Ile Ile Pro
Leu Leu
<210> 2103
<211> 162
<212> PRT
<213> Homo sapien (7211533-1-1-487)
<220>
<221> VARIANT
<222> (1)...(162)
<223> Xaa = Any Amino Acid
<400> 2103
Met Ala Ile Val Asn Pro Leu Leu Tyr Thr Val Ala Met Thr Lys Ile
                5
                                    10
                                                        15
Val Cys Ile Val Leu Ala Phe Gly Ser Cys Met Gly Gly Leu Ile Ser
           20
                                25
Ser Leu Thr His Thr Ile Gly Leu Val Lys Leu Ser Phe Cys Gly Pro
                           40
Asn Val Ile Ser His Phe Phe Cys Asp Leu Pro Pro Leu Leu Lys Leu
                        55
Ser Cys Ser Glu Thr Ser Met Asn Glu Leu Leu Leu Ile Phe Ser
                   70
                                       75
Gly Ile Ile Ala Thr Leu Thr Phe Leu Thr Val Val Ile Ser Tyr Ile
                                                        95
                85
                                   90
Phe Ile Val Ala Ala Ile Leu Arg Ile Arg Xaa Glu Ala Gly Arg Arg
           100
                                105
Lys Ala Phe Ser Thr Cys Thr Ser His Leu Ile Thr Val Thr Leu Phe
                           120
                                               125
Tyr Gly Ser Ile Ser Phe Ser Tyr Ile Gln Pro Asn Ser Gln Tyr Ser
                       135
                                           140
Leu Glu Gln Glu Lys Val Val Ser Val Phe Tyr Thr Leu Val Val Pro
145
                   150
Met Leu
<210> 2104
<211> 162
<212> PRT
<213> Homo sapien (7211534-1-1-485)
<400> 2104
Val Gly Ile Cys Asn Pro Leu Leu Tyr Thr Val Thr Met Ser Pro Gln
                                   10
Lys Cys Leu Leu Leu Leu Gly Val Tyr Gly Met Gly Ile Phe Gly
                               25
```

```
Ala Val Ala His Met Gly Asn Ile Met Phe Met Ser Phe Cys Gly Asp
                            40
Asn Leu Val Asn His Tyr Met Cys Asp Ile Leu Pro Leu Leu Glu Leu
                                            60
Ser Cys Asn Ser Ser Tyr Ile Asn Leu Leu Val Val Phe Ile Ile Val
                                        75
                   70
Thr Val Gly Ile Gly Val Pro Ile Val Thr Ile Phe Leu Ser Tyr Gly
                                    90
               85
Phe Ile Leu Ser Ser Ile Leu His Ile Ser Ser Thr Glu Gly Arg Ser
                               105
                                                    110
Lys Ala Phe Ser Thr Cys Ser Ser His Ile Ile Val Val Ser Leu Phe
                                                125
       115
                           120
Phe Gly Ser Gly Ala Phe Met Tyr Leu Lys Pro Pro Ser Ile Leu Pro
                       135
                                           140
Leu Asp Gln Gly Lys Val Ser Ser Ile Phe Cys Thr Ala Val Val Pro
                                        155
                  150
Met Phe
<210> 2105
<211> 162
```

```
<210> 2105
<211> 162
<212> PRT
<213> Homo sapien (7211536-1-1-487)
```

<400> 2105 Val Ala Ile Cys Lys Pro Leu His Tyr Val Val Ile Met Asn Asn Arg 10 Val Cys Thr Leu Leu Val Leu Cys Cys Trp Val Ala Gly Leu Met Ile 20 25 Ile Val Pro Pro Leu Ser Leu Gly Leu Gln Leu Glu Phe Cys Asp Ser 40 Asn Ala Ile Asp His Phe Ser Cys Asp Ala Gly Pro Leu Leu Lys Ile 55 60 Ser Cys Ser Asp Thr Trp Val Ile Glu Gln Met Val Ile Leu Met Ala 75 70 Val Phe Ala Leu Ile Ile Thr Pro Val Cys Val Ile Leu Ser Tyr Leu 85 Tyr Ile Val Arg Thr Ile Leu Lys Phe Pro Ser Val Gln Gln Arg Lys 100 105 Lys Ala Phe Ser Thr Cys Ser Ser His Met Ile Val Val Ser Ile Ala 120 115 Tyr Gly Ser Cys Ile Phe Ile Tyr Ile Lys Pro Ser Ala Lys Asp Glu 140 135 Val Ala Ile Asn Lys Gly Val Ser Val Leu Thr Thr Ser Val Ala Pro 155 Leu Leu

```
<210> 2106
<211> 162
<212> PRT
<213> Homo sapien (7211538-1-1-487)
```

```
60
Ser Cys Ser Asp Ile Phe Leu Asn Glu Leu Val Met Phe Thr Val Gly
                    70
Val Val Ile Thr Leu Pro Phe Met Cys Ile Leu Val Ser Tyr Gly
                                     90
Tyr Ile Gly Ala Thr Ile Leu Arg Val Pro Ser Thr Lys Gly Ile His
            100
                                105
                                                    110
Lys Ala Leu Ser Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Tyr
                            120
                                                125
Tyr Gly Ser Ile Phe Gly Gln Tyr Leu Phe Pro Thr Val Ser Ser Ser
                       135
                                           140
Ile Asp Lys Asp Val Ile Val Ala Leu Met Tyr Thr Val Val Thr Pro
                   150
Met Leu
<210> 2107
<211> 159
<212> PRT
<213> Homo sapien (7211540-1-1-478)
<400> 2107
Val Ala Ile Cys Asn Pro Leu Arg Tyr Leu Thr Val Met Asn Pro Gln
                                    10
Leu Cys Leu Trp Leu Val Leu Ala Cys Trp Cys Gly Gly Phe Ile His
                                25
Ser Ile Met Gln Val Ile Leu Val Ile Gln Leu Pro Phe Cys Gly Pro
                            40
Asn Glu Leu Asp Asn Phe Tyr Cys Asp Val Leu Gln Ile Ile Lys Leu
                        55
Ala Cys Met Asp Thr Tyr Val Val Glu Val Leu Val Ile Ala Asn Ser
                    70
Gly Leu Leu Ser Leu Val Cys Phe Leu Val Leu Leu Phe Ser Tyr Ala
                                    90
Ile Ile Leu Ile Thr Leu Arg Thr Arg Phe Cys Gln Gly Gln Asn Lys
                                105
Val Leu Ser Thr Cys Ala Ser His Leu Thr Val Val Ser Leu Ile Phe
                            120
                                                125
Val Pro Cys Val Phe Ile Tyr Leu Arg Pro Phe Cys Ser Phe Ser Val
                        135
                                            140
Asp Lys Ile Phe Ser Leu Phe Tyr Thr Val Ile Thr Pro Met Leu
<210> 2108
<211> 162
<212>- PRT
<213> Homo sapien (7211541-1-1-488)
<400> 2108
Met Ala Ile Cys Lys Pro Leu Leu Tyr Gly Ser Lys Met Thr Arg Cys
                                    10
Val Cys Leu Cys Leu Ala Ala Ala Pro Tyr Ile Tyr Gly Phe Ala Asn
                                25
Gly Leu Ser Gln Thr Thr Leu Met Leu Arg Leu Ser Phe Cys Gly Pro
Asn Asp Ile Asn His Phe Tyr Cys Ala Asp Pro Pro Leu Leu Val Leu
Ala Cys Ser Asp Thr Tyr Val Lys Glu Thr Ala Met Leu Val Val Ala
                    70
Gly Ser Asn Leu Ile Cys Ser Leu Thr Val Ile Leu Ile Ser Tyr Thr
                                    90
```

```
Phe Ile Phe Thr Ala Ile Leu Arg Ile His Thr Ala Glu Gly Arg Arg
                               105
           100
Lys Ala Phe Ser Thr Cys Gly Ser His Val Thr Ala Val Thr Val Phe
                           120
                                               125
        115
Tyr Gly Thr Leu Phe Cys Met Tyr Leu Arg Pro Pro Ser Glu Thr Ser
                       135
                                           140
Ile Gln Gln Gly Lys Ile Val Ala Val Phe Tyr Ile Phe Val Ser Pro
                                       155
                  150
Met Leu
<210> 2109
<211> 162
<212> PRT
<213> Homo sapien (7211542-1-1-487)
<400> 2109
Val Ala Ile Cys Lys Pro Leu His Tyr Thr Ser Ile Met Asn Arg Lys
                                   10
Leu Cys Thr Leu Leu Val Leu Cys Ala Trp Leu Ser Gly Phe Leu Thr
                               25
          20
Ile Phe Pro Pro Leu Met Leu Leu Leu Gln Leu Asp Tyr Cys Ala Ser
                           40
                                               45
Asn Val Ile Asp His Phe Ala Cys Asp Tyr Phe Pro Leu Leu Gln Leu
                                           60
                       55
Ser Cys Ser Asp Thr Trp Leu Leu Glu Val Ile Gly Phe Tyr Phe Ala
                   70
                                       75
Leu Val Thr Leu Leu Phe Thr Leu Ala Leu Val Ile Leu Ser Tyr Met
                                   90
                                                       95
Tyr Ile Ile Arg Thr Ile Leu Arg Ile Pro Ser Ala Ser Gln Arg Lys
                               105
            100
Lys Ala Phe Ser Thr Cys Ser Ser His Met Ile Val Ile Ser Ile Ser
                           120
                                               125
        115
Tyr:Gly Ser Cys Ile Phe Met Tyr Ala Asn Pro Ser Ala Lys Glu Lys
                                          140
                       135
Ala Ser Leu Thr Lys Gly Ile Ala Ile Leu Asn Thr Ser Val Ala Pro
145
                   150
Met Leu
<210> 2110
<211> 243
<212> PRT
<213> 'Homo sapien (7230851-8-1-2360)
<220>
<221> VARIANT
<222> (1)...(243)
<223> Xaa = Any Amino Acid
<400> 2110
Met Gln Ser Glu His Leu Ala Glu Phe Ser Glu Phe Leu Ile Leu Ser
                                   10
            5
1
Leu Ser Glu Ile Gln Asn Cys Ser Pro Phe Phe Gly Leu Phe Leu Ser
            20
                               25
Met Asn Leu Val Thr Val Leu Gly Asn Leu Leu Ile Ile Leu Ala Ile
                           40
                                :
                                              45
Ser Ser Asp Ser His Leu His Lys Pro Met Tyr Phe Leu Leu Ser Lys
                                           60
                       55
Leu Ser Met Ala Ala Ile Cys Phe Val Phe Thr Met Ile Gln Lys Met
                  . 70
                                       75
```

```
Met Val Asn Leu Arg Ala Gln Ser Lys Asp Ile Phe Thr Gln Pro Ser
              85
Gly Ser Pro Ile Pro Phe Xaa Met Cys Ser Leu Ile Arg Phe Leu Leu
                               105
           100
Ile Gln Gln Lys Ser Val Val Leu Ile Phe Glu Tyr Ser Leu Val Leu
                                               125
                           120
Ile His Pro Ile Xaa Ile Xaa Arg Cys Lys Leu Ile Ile Leu Leu Tyr
                                          140
                       135
Glu Pro Phe Lys Ile Ile Glu Asp Ser Tyr Val Leu Phe Leu Ile Ile
                                       155
                   150
Thr Ile Leu Ser Ser His Xaa Leu Ile His Asn Cys Xaa Xaa Val Met
                                   170
               165
Asp Phe Leu Leu Lys Gln Pro Leu Phe Tyr His Leu Met Leu Leu Val
                               185
Met Gln Gln Leu Thr Leu Asn Ala Leu Phe Ile Phe Xaa Thr Xaa Xaa
                           200
Leu Leu Leu Thr Ser Leu Xaa Asp Leu Lys Ile Ser Leu Cys Thr Val
                                            220
                      215
Val Ser Gln Xaa Ile Thr Thr Ile Ile Leu Lys Asn Lys Ile Lys Val
                    230
Val Ser Met
<210> 2111
<211> 313
<212> PRT
<213> Homo sapien (7239533-11-790-4930)
<220>
<221> VARIANT
<222> (1)...(313)
<223> Xaa = Any Amino Acid
<400> 2111
Met Glu Ser Gln Arg Asn Ile Xaa Lys Phe Ile Leu Met Ser Leu Ser
                                    10
Ser Ile Gln Asn Ile Gln Ile Phe Val Phe Val Phe Leu Phe Cys Asn
                                25
Val Ala Ile Leu Val Gly Asn Phe Leu Ile Leu Ile Ser Ile Xaa Cys
                            40
Ser Pro Leu Phe Asn Gln Pro Met His Tyr Phe Leu Gly Tyr Met Asn
                       55
Ile Tyr Tyr Thr Ser Cys Val Thr Pro Lys Ile Ile Gly Asp Leu Val
                                        75
                    70
Val Gly Arg Ile Asn Ile Ser Tyr Asp Arg Ile Phe Pro Met His Phe
                                    90
                85
Phe Gly Ile Ile Glu Ile Phe Ile Leu Thr Val Met Ala Phe Asp His
                                105
Tyr Val Ala Ile Cys Lys Pro Pro Arg Tyr Leu Ile Ile Met Asn Arg
                            120
Thr Lys Tyr Asn Thr Leu Ile Ser Val Ala Trp Leu Leu Gly Leu Ile
                                            140
                        135
His Ser Leu Phe Gln Phe Ser Met Lys Ile Trp Leu Pro Phe Cys Gly
                                        155
                    150
Ser Asn Lys Ile Asp Asp Xaa Tyr Xaa Asp Ile Phe Pro Leu Leu Lys
                                                        175
                                    170
                165
Val Ala Cys Thr Asp Thr Cys Ile Thr Gly Val Leu Val Val Ala Asn
                                                    190
                                185
            180
Ser Gly Met Phe Ala Leu Val Thr Phe Val Leu Ser Phe Gly Ser Tyr
                           200
Val Ile Ile Leu Phe Pro Leu Lys Asn His Ser Val Glu Gly Arg Cys
```

```
215
                                         220
Lys Ala Leu Ser Thr Cys Gly Ser His Ile Thr Met Val Ile Phe Phe
                          235
               230
Phe Glu Pro Ser Ile Phe Ala Tyr Leu Arg Pro Ser Thr Phe Pro Glu
                                250
              245
Asp Lys Ile Ser Ala Leu Phe Tyr Thr Ile Ile Ala Pro Met Phe Asn
                              265
His Leu Ile Tyr Asn Leu Arg Asn Thr Glu Met Lys Lys Ala Met Arg
                         280
                                            285
Lys Val Trp Tyr Gln Ile Ser Phe Ser Glu Glu Lys Gln Leu Ile Cys
            295
Pro Thr Xaa Cys Thr Lys Glu Leu Tyr
<210> 2112
<211> 311
<212> PRT
<213> Homo sapien (7239533-19-11510-15318)
<400> 2112
Met Gly Lys Glu Asn Cys Thr Thr Val Ala Glu Phe Ile Leu Leu Gly
                          10
Leu Ser Asp Val Pro Glu Leu Arg Val Cys Leu Phe Leu Leu Phe Leu
                              25
Leu Ile Tyr Gly Val Thr Leu Leu Ala Asn Leu Gly Met Ile Ala Leu
                                             45
   35
Ile Gln Val Ser Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                                      60
                      55
His Leu Ser Ser Val Asp Phe Cys Tyr Ser Ser Ile Ile Val Pro Lys
                  70
                                     75
Met Leu Ala Asn Ile Phe Asn Lys Asp Lys Ala Ile Ser Phe Leu Gly
                                 90
Cys Met Val Gln Phe Tyr Leu Phe Cys Thr Cys Val Val Thr Glu Val
                                                 110
                             105
          100
Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys Asn
                          120
                                             125
Pro Leu Leu Tyr Thr Val Thr Met Ser Trp Lys Val Arg Val Glu Leu
                                        140
                      135
Ala Ser Cys Cys Tyr Phe Cys Gly Thr Val Cys Ser Leu Ile His Leu
                                    155
                 150
Cys Leu Ala Leu Arg Ile Pro Phe Tyr Arg Ser Asn Val Ile Asn His
              165
                                170
Phe Phe Cys Asp Leu Pro Pro Val Leu Ser Leu Ala Cys Ser Asp Ile
                                                190
                             185
          180
Thr Val Asn Glu Thr Leu Leu Phe Leu Val Ala Thr Leu Asn Glu Ser
                                             205
                          200
Val Thr Ile Met Ile Ile Leu Thr Ser Tyr Leu Leu Ile Leu Thr Thr
                      215
                                         220
Ile Leu Lys Met Gly Ser Ala Glu Gly Arg His Lys Ala Phe Ser Thr
                                     235
                  230
Cys Ala Ser His Leu Thr Ala Ile Thr Val Phe His Gly Thr Val Leu
                                  250
               245
Ser Ile Tyr Cys Arg Pro Ser Ser Gly Asn Ser Gly Asp Ala Asp Lys
                              265
Val Ala Thr Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Ser Val
                         280
                                  285
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Leu Arg Lys Val
                   295
Met Gly Ser Lys Ile His Ser
```

```
<210> 2113
<211> 287
<212> PRT
<213> Homo sapien (7239533-20-19626-20657)
<220>
<221> VARIANT
<222> (1)...(287)
<223> Xaa = Any Amino Acid
<400> 2113
Tyr Ile Leu Leu Asp Ile Tyr Ile Cys Leu Asn Asn Thr His Val Xaa
                                    10
Leu Cys Val Glu Ser Gln Arg Gln Phe Lys Ile Ser Phe Tyr Phe Ser
                                25
                                                   30
Phe Phe Leu Leu Ala Ile Thr Xaa Phe Xaa Xaa Xaa Ile Leu Ile Ile
                            40
Met Lys Thr Xaa Gln Tyr Phe Leu Lys His Lys His Leu Lys Lys
                       55
                                           60
Phe Ser Xaa Cys Leu Val Tyr Ile Leu Thr Tyr Ile Leu Ser Leu Xaa
                                        75
                   70
Ser Lys Phe Phe Ala Leu Cys Xaa Ile Phe Ala Asp Lys Ala Phe Gln
                                    90
               85
Glu Gln Val Ser Gly Asn Xaa Xaa Ser Arg Ser Xaa Glu Ser Pro Val
                                                    110
           100
                                105
His Tyr Thr Leu Thr Met Ser Gln Lys Phe Cys Ser Ile His Pro Ala
                            120
                                                125
Gly Cys Tyr Asp Gln Gly Ile Xaa Ser Ile Pro Gly His Ser Phe Ser
                                            140
                        135
His Cys Ile Ala Tyr Cys Gly His Asn Val Val Asn Ile Phe Xaa Asn
                    150
                                        155
Lys Tyr Ser Val Ala Ile Ser Asp Ser Cys Ser Ser Ser Trp Ile Ala
                                    170
                165
Asp Phe Cys Leu Phe Val Cys Phe Ala Leu Val Asn Phe Asp Xaa Leu
                                185
           180
Arg Asn Leu Arg Val Leu Leu Leu Ser Phe His Phe Gln Leu Val Xaa
                            200
                                                205
Lys Ala Leu Ser Ala Ser Ala His Gln Pro Ser Pro Pro Ile Ser His
                                           220
                        215
Ile Ser Thr Ile Phe Leu Thr Leu Val Pro Asn Ser Lys Asn Ser Gln
                                        235
                    230
Ala Ile Val Lys Ala His Ser Val Cys Tyr Ala Met Leu Ile Pro Met
                                    250
               245
Leu Asn Ser Gln Thr Cys Ser Met Arg Tyr Lys Asn Val Asn Glu Ser
                                265
           260
Leu Gln Lys Leu Met Asp Phe Lys Ile Phe Xaa His Xaa Lys Gln
                            280
<210> 2114
<211> 256
<212> PRT
<213> Homo sapien (7239533-8-1261-3491)
<400> 2114
Met Tyr Phe Phe Leu Ser His Leu Ser Phe Leu Asp Thr Cys Tyr Ser
                                    10
Asn Val Phe Thr Pro Lys Leu Leu Glu Ile Leu Val Val Glu Asp Arg
                                25
Thr Ile Ser Phe Lys Gly Cys Met Val Gln Phe Phe Phe Gly Cys Ala
                            40
Phe Val Ile Thr Glu Met Phe Met Leu Ala Val Met Ala Tyr Asp Leu
```

```
60
                        55
Phe Met Ala Val Cys Asn Pro Leu Leu Tyr Thr Val Ala Met Ser Pro
                                        75
                    70
Lys Leu Cys Ala Leu Leu Val Ala Gly Thr Tyr Thr Trp Gly Gly Leu
                                    90
Cys Ser Leu Thr Leu Thr Tyr Ser Leu Leu Val Leu Ser Tyr Cys Gly
                                105
            100
Ser Asn Ile Ile Asn His Phe Gly Cys Glu Tyr Ser Ala Ile Leu Ser
                           120
                                                125
Leu Ser Cys Ser Asp Pro Tyr Phe Asn Gln Met Ala Cys Leu Val Ile
                                           140
                       135
Ser Ile Phe Ser Glu Ala Cys Ser Leu Leu Ala Ile Leu Ala Phe Tyr
                   150
                                       155
Val Phe Ile Val Ala Thr Val Ile Lys Met Leu Ser Thr Gly Gly Pro
                                   170
               165
Gln Lys Ala Ile Ser Thr Cys Ala Ser His Leu Thr Thr Val Ser Ile
                               185
Phe His Gly Val Ile Leu Leu Tyr Cys Val Pro Asn Ser Lys Ser
       195
                           200
                                                205
Ser Trp Leu Leu Val Lys Val Ala Thr Val Leu Phe Thr Val Ile Ile
                       215
                                           220
Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys
                                       235
                   230
Gly Thr Val Arg Lys Leu Ile Asn Ser Gln Ser Pro Phe His Ser Lys
<210> 2115
<211> 314
<212> PRT
<213> Homo sapien (7239533-9-1-1650)
<400> 2115
Met Met Wal Leu Arg Asn Leu Ser Met Glu Pro Thr Phe Ala Leu
                                    10
Leu Gly Phe Thr Asp Tyr Pro Lys Leu Gln Ile Pro Leu Phe Leu Val
           20
                                25
Phe Leu Leu Met Tyr Val Ile Thr Val Val Gly Asn Leu Gly Met Ile
                           40
Ile Ile Ile Lys Ile Asn Pro Lys Phe His Thr Pro Met Tyr Phe Phe
Leu Ser His Leu Ser Phe Val Asp Phe Cys Tyr Ser Ser Ile Val Thr
                                        75
                   70
Pro Lys Leu Leu Glu Asn Leu Val Met Ala Asp Lys Ser Ile Phe Tyr
                                    90
               85
Phe Ser Cys Met Met Gln Tyr Phe Leu Ser Cys Thr Ala Val Val Thr
                               105
Glu Ser Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala Ile
                           120
                                               125
Cys Asn Pro Leu Leu Tyr Thr Val Ala Met Ser Gln Arg Leu Cys Ala
                       135
                                           140
```

Asn His Phe Phe Cys Glu Tyr Thr Ala Leu Ile Ser Val Ser Gly Ser
180

Asp Ile Leu Ile Pro His Leu Leu Leu Phe Ser Phe Ala Thr Phe Asn
195

Glu Met Cys Thr Leu Leu Ile Ile Leu Thr Ser Tyr Val Phe Ile Phe

Leu Leu Val Ala Gly Ser Tyr Leu Trp Gly Met Phe Gly Pro Leu Val

Leu Leu Cys Tyr Ala Leu Arg Leu Asn Phe Ser Gly Pro Asn Val Ile

150

210 215 220
Val Thr Val Leu Lys Ile Arg Ser Val Ser Gly Arg His Lys Ala Phe

```
230
                                        235
Ser Thr Trp Ala Ser His Leu Thr Ala Ile Thr Ile Phe His Gly Thr
                245
                                   250
Ile Leu Phe Leu Tyr Cys Val Pro Asn Ser Lys Asn Ser Arg Gln Thr
                                265
Val Lys Val Ala Ser Val Phe Tyr Thr Val Val Asn Pro Met Leu Asn
                           280
Pro Pro Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Asp Ala Phe Trp
                     295
Lys Leu Ile His Thr Gln Val Pro Phe His
                    310
<210> 2116
<211> 308
<212> PRT
<213> Homo sapien (7239554-20-1-1871)
<400> 2116
Met Met Ser Asn Gln Thr Leu Val Thr Glu Phe Ile Leu Gln Gly Phe
                                   10
Ser Glu His Pro Glu Tyr Arg Val Phe Leu Phe Ser Cys Phe Leu Phe
Leu Tyr Ser Gly Ala Leu Thr Gly Asn Val Leu Ile Thr Leu Ala Ile
                           40
Thr Phe Asn Pro Gly Leu His Ala Pro Met Tyr Phe Phe Leu Leu Asn
                    55
                                           60
Leu Ala Thr Met Asp Ile Ile Cys Thr Ser Ser Ile Met Pro Lys Ala
                    70
                                       75
Leu Ala Ser Leu Val Ser Glu Glu Ser Ser Ile Ser Tyr Gly Gly Cys
                                   90
               85
Met Ala Gln Leu Tyr Phe Leu Thr Trp Ala Ala Ser Ser Glu Leu Leu
                               105
Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys His Pro
                            120
Leu His Tyr Ser Ser Met Met Ser Lys Val Phe Cys Ser Gly Leu Ala
                        135
                                           140
Thr Ala Val Trp Leu Leu Cys Ala Val Asn Thr Ala Ile His Thr Gly
                   150
                                       155
Leu Met Leu Arg Leu Asp Phe Cys Gly Pro Asn Val Ile Ile His Phe
               165
                                   170
Phe Cys Glu Val Pro Pro Leu Leu Leu Ser Cys Ser Ser Thr Tyr
                               185
Val Asn Gly Val Met Ile Val Leu Ala Asp Ala Phe Tyr Gly Ile Val
                           200
Asn Phe Leu Met Thr Ile Ala Ser Tyr Gly Phe Ile Val Ser Ser Ile
  - 210 --- 215
                                          -220
Leu Lys Val Lys Thr Ala Trp Gly Arg Gln Lys Ala Phe Ser Thr Cys
                  230
                                       235
Ser Ser His Leu Thr Val Val Cys Met Tyr Tyr Thr Ala Val Phe Tyr
               245
                                   250
Ala Tyr Ile Ser Pro Val Ser Gly Tyr Ser Ala Gly Lys Ser Lys Leu
                               265
           260
Ala Gly Leu Leu Tyr Thr Val Leu Ser Pro Thr Leu Asn Pro Leu Ile
                           280
                                              285
Tyr Thr Leu Arg Asn Lys Glu Val Lys Ala Ala Leu Arg Lys Leu Phe
                       295
Pro Phe Phe Arg
305
<210> 2117
<211> 157
```

```
<212> PRT
<213> Homo sapien (7239554-9-1-1342)
<220>
<221> VARIANT
<222> (1)...(157)
<223> Xaa = Any Amino Acid
<400> 2117
Met Gly Glu Ala Arg Asn Arg Thr Val Val Gln Glu Phe Ile Leu Glu
                                    10
Gly Phe Pro Ala Val Gln His Leu Gly Asn Val Leu Phe Leu Val His
           20
                                25
Leu Leu Ala Tyr Leu Ala Ser Ile Met Ala Asn Met Leu Ile Ile Thr
Ile Thr Trp Ala Asp His His Leu Gln Thr Pro Met Tyr Phe Phe Leu
                        55
                                            60
Ser Ser Phe Ser Phe Cys Glu Cys Cys Phe Ile Thr Thr Val Ile Pro
                    70
                                        75
Lys Leu Leu Val Ile Leu Leu Ser Gly Arg Ala Lys Ile Pro Leu Ser
                                    90
Thr Thr Leu Ser His Ala Val Pro Phe Ser Phe Leu Tyr Ser Trp Val
                                                    110
           100
                                105
Asn Ser Phe Ser Ser Leu Asn Gly Cys Asp Val Pro Leu Asp Xaa Tyr
       115
                            120
                                                125
Leu Ala Ile Cys Lys Pro Leu His Tyr Ser Thr Ile Met Ser Leu Arg
                        135
                                            140
Thr Ser Phe His Lys Val Thr Ala Trp Leu Cys Pro Gly
                    150
<210> 2118
<211> 129
<212> PRT
<213> Homo sapien (7239558-10-440-1325)
<400> 2118
Met Gln Gly Glu Asn Phe Thr Ile Trp Ser Ile Phe Phe Leu Glu Gly
                                    10
Phe Ser Gln Tyr Pro Gly Leu Glu Val Val Leu Phe Val Phe Ser Leu
          20
                                25
Val Met Tyr Leu Thr Thr Leu Leu Gly Asn Ser Thr Leu Ile Leu Ile
Thr Ile Leu Asp Ser Arg Leu Lys Thr Pro Met Tyr Leu Phe Leu Gly
                       55
                                           60
Asn Leu Ser Phe Met Asp Ile Cys Tyr Thr Ser Ala Ser Val Pro Thr
                    70
                                        75
Leu Leu Val Asn Leu Leu Ser Ser Gln Lys Thr Ile Ile Phe Ser Gly
                                    90
Cys Ala Val Gln Met Tyr Leu Ser Leu Ala Met Gly Ser Thr Glu Cys
                                105
Val Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                            120
       115
Pro
<210> 2119
<211> 313
<212> PRT
<213> Homo sapien (7248974-19-1-3170)
<220>
```

```
<221> VARIANT
<222> (1) ... (313)
<223> Xaa = Any Amino Acid
<400> 2119
Met Leu Gly Asn Tyr Ser Ser Ala Thr Glu Phe Phe Leu Leu Gly Phe
1
                5
                                    10
Pro Gly Ser Gln Glu Val Arg Arg Ile Leu Phe Val Asn Phe Phe
                               25
            20
Leu Tyr Ala Val Thr Val Met Gly Asn Thr Val Ile Ile Val Thr Val
                            40
Cys Val Asp Lys His Leu Gln Ser Pro Met Tyr Phe Phe Leu Gly His
                        55
                                            60
Leu Cys Val Leu Glu Ile Leu Ile Thr Ser Thr Ala Ala Pro Phe Met
                    70
                                       75
Leu Trp Gly Leu Leu Pro Ser Thr Gln Ile Met Ser Leu Thr Ala
                85
                                    90
Cys Ala Ala Gln Leu Leu Tyr Leu Ser Leu Gly Thr Ser Glu Leu Ala
                                105
            100
Leu Met Gly Val Met Ala Val Asp His Tyr Val Ala Val Cys Asn Pro
        115
                            120
                                                125
Leu Arg Tyr Asn Ile Ile Met Asn Ser Ser Thr Cys Val Trp Met Val
                       135
                                           140
Ile Val Ser Trp Val Phe Gly Phe Leu Phe Gln Ile Trp Pro Val Tyr
                   150
                                       155
Ala Thr Phe Gln Leu Thr Phe Cys Lys Ser Asn Val Leu Asp His Phe
               165
                                   170
                                                       175
Tyr Cys Asp Xaa Gly Gln Leu Leu Lys Val Ser Cys Glu Asp Thr Leu
                                                    190
            180
                                185
Phe Thr Glu Phe Ile Leu Phe Leu Met Ala Val Phe Ile Ile Gly
                            200
                                                205
Ser Leu Ile Pro Thr Ile Val Ser Tyr Thr Tyr Ile Ile Ser Thr Ile
                        215
                                           220
Leu Lys Ile Pro Leu Ala Ser Gly Trp Arg Lys Ser Phe Ser Thr Cys
                   230
                                       235
Ala Ser His Phe Thr Cys Val Val Ile Gly Tyr Ser Ser Cys Leu Phe
                245
                                    250
Leu Tyr Thr Lys Pro Lys Gln Thr Gln Ala Ala Lys Tyr Asn Arg Ile
                                                   270
                                265
           260
Ala Ser Leu Leu Val Leu Val Val Thr Pro Phe Leu Asn Pro Phe Ile
                            280
                                                285
Phe Thr Leu Arg Asn Asp Lys Phe Ile Gln Ala Phe Gly Asp Gly Met
    290
                       295
                                           300
Lys His Cys Tyr Gln Leu Leu Arg Ile
                   310
<210> 2120
<211> 138
<212> PRT
<213> Homo sapien (7248974-26-1-596)
<220>
<221> VARIANT
<222> (1) ... (138)
<223> Xaa = Any Amino Acid
<400> 2120
Leu Leu Ser Leu Trp Ile Phe Thr Leu Phe Cys Tyr Tyr Val Xaa Tyr
               5
                                    10
Cys Asp Glu Lys Pro Leu Phe Val Tyr Thr Leu Ile Pro Lys Cys Val
                                25
            20
```

.........

```
Ser Asp Ile Xaa Gly Met Asn Phe Tyr Lys Cys Asn Cys Trp Val Met
                            40
Gly Met Ser Asn Phe Asn Ser Phe Tyr Gln Val Phe Ile Glu His Arg
Val Phe Ile Val Xaa Pro Ala Val Gly Gly Cys Phe Phe Ile Val Ser
                    70
Asn Ile Val Cys Xaa Xaa Thr Leu Gly Lys Lys Leu Asn Ile Phe Ile
                                    90
Lys Ser Asn Ser His Leu Thr Thr Ile Ser Ile Tyr Gln Arg Gly Gly
                               105
            100
Met Val Thr Trp Ile Gly His Ser Asn Ser Ser Ser Tyr Gln Xaa Thr
                           120
       115
Xaa Asp Tyr Ser Leu Leu Tyr Xaa Leu Ile
<210> 2121
<211> 161
<212> PRT
<213> Homo sapien (7248974-31-3444-4455)
<220>
<221> VARIANT
<222> (1)...(161)
<223> Xaa = Any Amino Acid
<400> 2121
Ile Cys Gly Ser His Ser Gly Val Thr Glu Phe Cys Leu Leu Gly Phe
                                    10
1
Pro Gly Ser Gln Xaa Val Cys His Leu Leu Pro Ser Ser Phe Val Ser
            20
                                25
Ile Val Ile Arg Asn Tyr Val Ile Ile Val Cys Val Glu Lys Cys
                            40
                                                45
Leu Leu Phe Leu Leu Tyr Leu Phe Tyr Gly Asp Leu Ser Val Met Glu
                        55
Ile Leu Ile Thr Tyr Thr Ala Val Pro Leu Met Leu Arg Gly Cys Tyr
                    70
                                        75
Phe Pro Xaa Phe Lys Gln Tyr Leu Xaa Xaa His Val Ser Val Gln Leu
                                    90
Tyr Met Asn Phe Phe Gly Gly Thr Gln Glu Phe Ala Leu Leu Gly Val
                                105
Met Thr Val Asn His Tyr Val Ala Leu Cys Asn Ser Leu Lys Xaa Asn
                            120
                                                125
        115
Ile Ile Met Ser Ser Thr His Cys Ile Trp Leu Val Ile Val Leu Leu
                       135
                                           140
Ile Gly Phe Leu Ser Glu Ile Trp Ser Val Tyr Ala Thr Phe Gln Leu
                                        155
Pro
<210> 2122
<211> 169
<212> PRT
<213> Homo sapien (7249005-11-1-1318)
<220>
<221> VARIANT
<222> (1)...(169)
<223> Xaa = Any Amino Acid
<400> 2122
Asn Ser Glu Ser Lys His Phe Leu Leu Leu Lys Leu Cys Ser Met Phe
```

```
10
 1
                 5
Ala Val Thr Phe Leu Ser Leu Ile Leu Ser Gly Lys Gly Leu Gln Phe
            20
                                25
Pro Phe Tyr Phe Ser Glu Cys Asn Cys Lys Val Ser Asp Val Phe Thr
Val Glu Thr Arg Glu Gln Glu Ala Pro Met Lys Thr Thr Gly Phe Tyr
Gly Gly Ile Met Val Trp Xaa Val Glu Ala Cys Tyr Ser Ser Cys Ile
65
                    70
                                        75
Ser Leu Gly Ser Asn Pro Asp Tyr Thr Ala Tyr Gly Ala Leu Thr Ala
                                    90
Arg Xaa Pro Gln Glu Phe Leu Cys Trp Xaa Asn Arg Phe Ile Ile Met
                                105
Pro Val Asn Leu Lys Met Leu Xaa Val Lys Thr Ile Trp Cys Phe Ser
                            120
Arg Thr Gln Xaa Ser Leu Thr Val Ile Thr Ile Phe Pro Leu Pro Thr
                        135
                                            140
Phe Asn Lys Xaa Ile Ile Tyr Ile Tyr Xaa Thr Lys Glu Ile Xaa Ser
                  150
                                        155
Cys Phe Ser Glu Thr Thr Gln Phe Tyr
                165
<210> 2123
<211> 110
<212> PRT
<213> Homo sapien (7249007-9-15200-16107)
<220>
<221> VARIANT
<222> (1)...(110)
<223> Xaa = Any Amino Acid
<400> 2123
Ser His Thr Glu Pro Gln Asn Leu Thr Gly Val Ser Glu Phe Leu Leu
                                    10
Leu Gly Leu Ser Glu Asp Pro Glu Leu Gln Pro Val Leu Ala Trp Leu
            20
                                25
Ser Leu Ser Ile Tyr Leu Val Thr Val Leu Gly Asn Leu Leu Ile Ile
                            40
Leu Ala Val Ser Ser Asp Ser His Leu His Thr Pro Ile Tyr Phe Phe
                        55
Leu Phe Asn Leu Ser Leu Ala Asp Ile Gly Phe Thr Ser Ala Met Val
                    70
                                        75
Pro Lys Met Ile Val Asp Met Gln Ser His Ser Arg Val Ile Ser Tyr
                                   90
               85
Ala Gly Cys Leu Thr Xaa Met Ser Phe Phe Val Leu Phe Phe
                                105
<210> 2124
<211> 241
<212> PRT
<213> Homo sapien (7249007-9-22951-24848)
<220>
<221> VARIANT
<222> (1)...(241)
<223> Xaa = Any Amino Acid
<400> 2124
Leu Arg Gln Leu His Asn Leu Phe Leu Pro Val Gly Phe Phe Leu Ser
                5
                                    10
```

```
Ser Tyr Ser Phe Xaa Val Ile Trp His Asn Leu Asn Ser Val Thr Lys
                               25
Phe Ser Ser Lys Thr Asp Glu Ser Lys Leu Lys Ser Xaa Cys Lys Val
                           40
Lys Ser Leu Phe Phe Thr Tyr Ala Gly Cys Cys Glu Lys Leu Leu
                                            60
                       55
Ala Val Glu Lys Arg Asp Arg Ser Phe Leu Phe Ile His Phe Leu Leu
                                       75
His Xaa Ser Thr Ala Val Ser Asp His Ala Lys Val Glu Pro Gly Val
                                    90
               85
Gly Arg Arg Glu Arg Gly Xaa Gly Lys Ser His Xaa Leu Thr Leu Lys
                               105
           100
Xaa Asp Gly Phe Thr Phe Ser Gly Pro Gly Gln Cys Leu Leu Phe Leu
                           120
                                               125
Thr His Ile Lys Pro Leu Xaa Met His Leu Thr Met Gly Ala Ser Pro
                                           140
                       135
Leu Pro Glu Val Arg Pro Pro Asp Phe Phe Gln Phe Pro Val Val Pro
                   150
                                       155
His Asn Pro His Ser Trp Thr Phe Thr Gln Tyr Val Arg Leu Pro Ser
                                    170
               165
Trp Val Gln Ser Leu Ser Lys Gln Leu Thr His Phe Ser Phe His Gly
                                                   190
           180
                               185
Gln Ser Phe Lys Ser Ala Tyr Ile Xaa Leu Ala Ile Ser Gly Ala Val
                           200
       195
Thr Pro Ile Leu Leu Gln Arg Pro Arg Gly Gln Ser Ser Val Ala Val
                                           220
                      215
Xaa His Ile Pro Asp Asp Arg Ile His Thr Leu Lys Pro Leu Ser Gly
                   230
                                       235
```

```
<210> 2125
```

## <220>

## <400> 2125

Met Thr Thr His Asn Ser Thr Gly Ser Ser His Ser Leu Phe Ile Leu 10 Leu Ser Ile Pro Gly Leu Glu Asp Gln His Thr Trp Met Ser Leu Pro 25 20 Phe Phe Ile Ser Tyr Leu Val Ala Phe Leu Gly Asn Ser Leu Ile Ile 45 40 Phe Ile Ile Ile Thr Glu Cys Ser Leu His Glu Pro Met Tyr Leu Phe 55 60 Leu Cys Met Leu Ala Val Ala Asp Leu Ile Leu Ser Thr Thr Thr Val 75 70 Pro Lys Ala Leu Ala Ile Phe Trp Phe Tyr Ala Gly Ala Ile Ser Leu 90 Gly Gly Cys Val Thr Gln Ile Phe Phe Ile His Ala Thr Phe Ile Glu 110 100 105 Glu Ser Gly Ile Leu Leu Ala Met Ala Leu Asp Arg Tyr Val Ala Ile 125 120 115 Cys Asp Pro Leu His Tyr Thr Thr Val Leu Ser Arg Ala Lys Ile Thr 135 . 140 Lys Ile Gly Leu Ala Val Val Leu Arg Ser Phe Cys Val Ile Met Pro

<sup>&</sup>lt;211> 318

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Homo sapien (7249162-23-8972-11111)

<sup>&</sup>lt;221> VARIANT

<sup>&</sup>lt;222> (1)...(318)

<sup>&</sup>lt;223> Xaa = Any Amino Acid

```
150
                                        155
145
Asp Val Phe Leu Val Lys Arg Leu Pro Phe Cys His Ser Asn Leu Leu
                                    170
                165
Pro His Thr Tyr Cys Glu His Met Ala Val Ala Lys Phe Ala Cys Ala
                               185
            180
Asp Ile His Val Asn Val Trp Tyr Gly Leu Ser Val Leu Leu Tyr Thr
                            200
Val Val Leu Asp Ala Leu Leu Ile Leu Val Ser Xaa Ser Phe Ile Leu
                                            220
                        215
Tyr Thr Gly Phe His Leu Pro Ser Pro Gly Ala Arg Gln Lys Ala Leu
                                        235
                    230
Gly Thr Cys Gly Ser Pro Leu Arg Val Ile Ser Met Phe Tyr Leu Pro
                                   250
                245
Gly Ile Phe Thr Ile Ile Thr Gln Arg Phe Gly His His Val Pro Phe
                                                    270
                               265
His Thr His Ile Leu Leu Gly Asn Val Trp Val Leu Ala Pro Pro Met
                          280
                                                285
Leu Asn Pro Ile Ile Tyr Gly Ile Asn Thr Arg Gln Ile Gln Glu Cys
                                           300
                       295
Val Leu Ser Leu Leu Ser Ser Gln Arg Lys Xaa Cys Xaa Ile
                    310
<210> 2126
<211> 322
<212> PRT
<213> Homo sapien (7249220-22-20773-24242)
<220>
<221> VARIANT
<222> (1)...(322)
<223> Xaa = Any Amino Acid
<400> 2126
Met Ser Val Val Glu Ala Asn Asn Ile Ser Gly Pro Val Ser Glu Phe
                                    10
                5
Ile Leu Leu Gly Phe Pro Cys Arg Cys Arg Glu Thr Lys Ile Leu Leu
            20
                                25
Phe Val Val Phe Ser Leu Ile Tyr Leu Leu Thr Leu Met Gly Asn Thr
                            40
Ser Ile Ile Cys Ala Val Trp Ser Ser Gln Lys Leu His Thr Pro Met
                        55
Tyr Ile Leu Leu Ala Asn Phe Ser Phe Leu Glu Ile Cys Cys Ile Ser
                    70
                                        75
Ser Asp Val Pro Asn Met Leu Ala Asn Leu Ile Ser His Ile Lys Ser
                                    90
Ile Ser Tyr Ala Gly Cys Leu Leu Gln Phe Phe Tyr Phe Ser Met Cys
                                105
            100
Ala Ala Glu Gly Tyr Phe Leu Ser Val Met Ser Phe Asp Arg Phe Leu
                                                125
                            120
Thr Ile Cys Arg Pro Leu His Tyr Pro Thr Val Met Thr His His Leu
                                            140
                        135
Cys Val Xaa Leu Val Ala Phe Cys Arg Ala Gly Gly Phe Leu Ser Ile
                                        155
                    150
Leu Met Pro Ala Val Leu Met Ser Arg Val Pro Phe Cys Gly Pro Asn
                                    170
                                                        175
                165
Ile Thr Asp His Phe Phe Cys Asn Leu Gly Pro Leu Leu Ala Leu Ser
                                                    190
                                185
            180
Cys Ala Pro Val Pro Lys Thr Thr Leu Thr Cys Ala Thr Val Ser Ser
                            200
                                                205
        195
Leu Ile Ile Phe Ile Thr Phe Leu Tyr Ile Leu Gly Ser His Ile Leu
                                            220
                        215
```

```
Val Leu Arg Ala Val Leu Trp Val Pro Ala Gly Ser Gly Arg Asn Lys
                  230
                                       235
225
Ala Phe Ser Thr Cys Ala Ser His Phe Leu Val Val Ser Phe Phe Tyr
               245
                                   250
Gly Ser Val Met Val Met Tyr Val Ser Pro Gly Ser Arg Ser Arg Pro
                               265
Gly Thr Gln Lys Phe Val Thr Leu Phe Tyr Cys Thr Ala Thr Pro Phe
                          280
                                              285
Phe Asn Pro Leu Thr Tyr Ser Leu Trp Asn Lys Asp Met Thr Asp Ala
                       295
                                          300
Leu Lys Lys Val Leu Gly Val Pro Ser Lys Glu Ile Ser Trp Asn Thr
                   310
Leu Lys
```

<210> 2127 <211> 311 <212> PRT <213> Homo sapien (7249282-10-14985-16332)

<400> 2127 Met Gly Arg Arg Asn Asn Thr Asn Val Pro Asp Phe Ile Leu Thr Gly Leu Ser Asp Ser Glu Glu Val Gln Met Ala Leu Phe Ile Leu Phe Leu Leu Ile Tyr Leu Ile Thr Met Leu Gly Asn Val Gly Met Ile Leu Ile Ile Arg Leu Asp Leu Gln Leu His Thr Pro Met Tyr Phe Phe Leu Thr His Leu Ser Phe Ile Asp Leu Ser Tyr Ser Thr Val Ile Thr Pro Lys Thr Leu Ala Asn Leu Leu Thr Ser Asn Tyr Ile Ser Phe Met Gly Cys Phe Ala Gln Met Phe Phe Phe Val Phe Leu Gly Ala Ala Glu Cys Phe Leu Leu Ser Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Ser Pro Leu Arg Tyr Pro Val Ile Met Ser Lys Arg Leu Cys Cys Ala Leu Val Thr Gly Pro Tyr Val Ile Ser Phe Ile Asn Ser Phe Val Asn Val Val Trp Met Ser Arg Leu His Phe Cys Asp Ser Asn Val Val Arg His Phe Phe Cys Asp Thr Ser Pro Ile Leu Ala Leu Ser Cys Met Asp Thr Tyr Asp Ile Glu Ile Met Ile His Ile Leu Ala Gly Ser Thr Leu Met Val Ser Leu Ile Thr Ile Ser Ala Ser Tyr Val Ser Ile Leu Ser Thr Ile Leu Lys Ile Asn Ser Thr Ser Gly Lys Gln Lys Ala Leu Ser Thr Cys Ala Ser His Leu Leu Gly Val Thr Ile Phe Tyr Gly Thr Met Ile Phe Thr Tyr Leu Lys Pro Arg Lys Ser Tyr Ser Leu Gly Arg Asp Gln Val Ala Ser Val Phe Tyr Thr Ile Val Ile Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Asn Ala Leu Ile Arg Val Met Gln Arg Arg Gln Asp Ser Arg

```
<210> 2128
<211> 306
<212> PRT
<213> Homo sapien (7249282-10-21300-24858)
<220>
<221> VARIANT
<222> (1)...(306)
<223> Xaa = Any Amino Acid
<400> 2128
Thr Ala Gly Ser Asn Phe Thr Glu Val Thr Val Phe Ile Leu Ser Gly
                                   10
Tyr Ala Asn His Pro Glu Leu Gln Val Ser Phe Phe Leu Met Phe Leu
Phe Ile Tyr Leu Phe Thr Ile Leu Gly Asn Leu Gly Leu Ile Met Leu
       35
                           40
Ile Arg Met Asp Ser Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                    55
                                           60
Asn Leu Ala Phe Ile Asp Ile Phe Tyr Ser Ser Ser Val Thr Pro Lys
                    70
                                       75
Thr Leu Ala Asn Phe Gln Ser Asn Gln Arg Ser Ile Ser Phe Val Gly
                85
                                    90
Cys Phe Val Gln Met Tyr Phe Ser Val Gly Leu Val Cys Thr Glu Cys
            100
                                105
                                                    110
Phe Leu Leu Gly Ser Met Ala Tyr Asp Cys Tyr Val Ala Ile Trp Asn
        115
                            120
                                               125
Pro Tyr Ser Val Val Ile Ser Xaa Lys Ala Cys Asn Trp Leu Gly Val
                                           140
                        135
Met Ser Tyr Thr Ile Gly Phe Thr Asn Ser Leu Val Ser Val Trp Val
                    150
                                       155
Ile Ser Gly Leu Phe Cys Asp Ser Ser Ile Asn Phe Phe Cys Asp
               165
                                   170
                                                       175
Thr Thr Ala Leu Leu Ala Leu Ser Cys Val Asp Ala Phe Ser Thr Glu
                                                  190
            180
                               185
Met Val Ser Phe Ala Leu Ala Gly Phe Thr Leu Leu Gly Ser Ile Leu
       195
                            200
                                               205
Ile Ile Thr Val Thr Tyr Ile Ala Ile Thr Ser Ala Ile Leu Lys Asn
                        215
Gln Trp Ala Ala Gly Trp Gln Lys Ala Phe Ser Thr Cys Ala Phe His
                   230
                                       235
Leu Met Ala Leu Thr Ile Phe Tyr Gly Ser Leu Ile Phe Thr Tyr Leu
                                                       255
               245
                                   250
Gln Leu Asp Lys Thr Ser Ser Leu Ile His Ala Gln Leu Ala Phe Val
           260 -
                               265
Phe Tyr Met Thr Val Ile Pro Met Leu Asn Pro Leu Ile Xaa Ser Leu
                          280
Arg Asn Lys Asp Val Lys Asn Ala Leu Leu Arg Val Ile His Arg Lys
  290
                        295
                                           300
Leu Phe
305
<210> 2129
<211> 327
<212> PRT
<213> Homo sapien (7249282-10-488-2060)
<220>
<221> VARIANT
<222> (1) ... (327)
```

<223> Xaa = Any Amino Acid

```
<400> 2129
Lys Leu Gln Leu Asn Asn Phe Thr Glu Val Thr Met Phe Ile Leu Ile
                                   10
1
Ser Phe Thr Glu Glu Phe Asp Val Gln Val Phe Leu Phe Leu Phe
                               25
Leu Ala Ile Tyr Leu Phe Thr Leu Ile Gly Asn Leu Gly Leu Val Val
                                              45
                           40
       35
Pro Ile Ile Gly Asp Phe Trp Leu His Ser Pro Met Tyr Tyr Phe Leu
                       55
Gly Val Leu Ser Phe Leu Asp Val Cys Tyr Ser Thr Val Val Thr Pro
                                       75
                   70
Lys Met Leu Val Asn Phe Leu Ala Lys Asn Lys Ser Ile Ser Phe Leu
                                   90
               85
Gly Cys Ala Thr Gln Met Phe Leu Ala Cys Thr Phe Gly Thr Thr Glu
                              105
                                                   110
           100
Cys Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Tyr
                                               125
                           120
      115
Asn Pro Leu Leu Tyr Ser Val Ser Met Ser Pro Arg Val Tyr Val Pro
                       135
                                           140
Leu Ile Thr Ala Ser Tyr Val Ala Ser Ile Leu His Ala Thr Ile His
                                      155
                   150
Thr Val Ala Thr Phe Ser Leu Ser Phe Cys Gly Ser Asn Glu Ile Arg
                                  170
              165
His Val Phe Cys Asn Met Pro Pro Leu Leu Ala Ile Ser Cys Ser Asp
                              185
                                                190
           180
Thr His Val Ile Gln Leu Leu Phe Phe Tyr Phe Val Gly Ser Ile Glu
                                              205
                         200
Ile Val Thr Ile Leu Ile Val Leu Ile Ser Tyr Gly Phe Ile Leu Leu
                       215
                                           220
Ala Ile Leu Lys Met Gln Ser Ala Glu Gly Arg Arg Lys Val Phe Ser
                   230
                                       235
Thr Cys Gly Ala His Leu Thr Gly Val Thr Ile Tyr His Gly Thr Ile
                                   250
               245
Leu Phe Met Tyr Val Arg Pro Ser Ser Ser Tyr Thr Ser Asp Asn Asp
            260
                               265
Met Ile Val Ser Ile Phe Tyr Thr Ile Val Ile Pro Met Leu Asn Pro
                                               285
                          280
Ile Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Ile Lys Arg
                      295
                                           300
Leu Leu Val Arg Asn Trp Phe Ile Asn Lys Leu Xaa Phe Xaa Asn Xaa
                   310
                                       315
Val Lys Leu Gln Ile Ile Leu
               325
```

<210> 2130

<211> 319

<212> PRT

<213> Homo sapien (7249282-11-14537-16718)

<400> 2130

 Met
 Asn
 His
 Val
 Val
 Lys
 His
 Asn
 His
 Thr
 Ala
 Val
 Thr
 Lys
 Val
 Thr

 Glu
 Phe
 Ile
 Leu
 Met
 Gly
 Ile
 Thr
 Asp
 Asn
 Pro
 Gly
 Leu
 Gln
 Ala
 Pro

 Leu
 Phe
 Gly
 Leu
 Ile
 Ile
 Ile
 Tyr
 Leu
 Val
 Thr
 Val
 Ile
 Gly
 Asn

 Leu
 Phe
 Leu
 Ile
 Ile
 Tyr
 Leu
 Asp
 Ser
 Lys
 Leu
 His
 Thr
 Pro

 Met
 Tyr
 Phe
 Leu
 Arg
 His
 Leu
 Ser
 Ile
 Thr
 Asp
 Leu
 Fix
 Tyr
 Ser

```
75
                    70
Thr Val Ile Ala Pro Lys Met Leu Val Asn Phe Ile Val His Lys Asn
                85
                                    90
Thr Ile Ser Tyr Asn Trp Tyr Ala Thr Gln Leu Ala Phe Phe Glu Ile
                                105
           100
Phe Ile Ile Ser Glu Leu Phe Ile Leu Ser Ala Met Ala Tyr Asp Arg
                           120
Tyr Val Ala Ile Cys Lys Pro Leu Leu Tyr Val Ile Ile Met Ala Glu
                                            140
                        135
Lys Val Leu Trp Val Leu Val Ile Val Pro Tyr Leu Tyr Ser Thr Phe
                   150
                                        155
Val Ser Leu Phe Leu Thr Ile Lys Leu Phe Lys Leu Ser Phe Cys Gly
                                    170
                165
Ser Asn Ile Ile Ser Tyr Phe Tyr Cys Asp Cys Ile Pro Leu Met Ser
                                185
                                                    190
           180
Ile Leu Cys Ser Asp Thr Asn Glu Leu Glu Leu Ile Ile Leu Ile Phe
                            200
                                                205
Ser Gly Cys Asn Leu Leu Phe Ser Leu Ser Ile Val Leu Ile Ser Tyr
                        215
                                            220
Met Phe Ile Leu Val Ala Ile Leu Arg Met Asn Ser Arg Lys Gly Arg
                   230
                                        235
Tyr Lys Ala Phe Ser Thr Cys Ser Ser His Leu Thr Val Val Ile Met
                                    250
                245
Phe Tyr Gly Thr Leu Leu Phe Ile Tyr Leu Gln Pro Lys Ser Ser His
                               265
            260
Thr Leu Ala Ile Asp Lys Met Ala Ser Val Phe Tyr Thr Leu Leu Ile
                                                285
                           280
Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys
                       295
                                            300
Asp Ala Leu Lys Arg Thr Leu Thr Asn Arg Phe Lys Ile Pro Ile
                   310
<210> 2131
<211> 317
<212> PRT
<213> Homo sapien (7249282-11-25530-27263)
<220>
<221> VARIANT
<222> (1) . . . (317)
<223> Xaa = Any Amino Acid
<400> 2131
Met Gly Gln Lys Asn Leu Thr Val Leu Thr Glu Leu Ile Leu Met Glu
                                    10
Ile Thr Arg Arg Leu Glu Leu Gln Leu Ser Leu Phe Trp Val Phe Leu
            20
                                25
Ile Ile Cys Thr Phe Thr Val Val Ser Lys Glu Cys Ile Ile Leu
                            40
Asn Asn Val Asp Leu Gly Leu Gln Thr Phe Val Tyr Phe Leu Ile Arg
                        55
Tyr Leu Asn Phe Ile Asn Leu Gly Asn Ser Met Val Ile Tyr Pro Lys
                    70
                                        75
Ile Leu Val Asn Phe Val Val Ala Gln Asn Ala Ile Pro Cys Tyr Ala
                85
                                    90
Cys Thr Met Gln Met Ala Phe Phe Ile Met Phe Ile Ile Cys Glu Leu
                                105
           100
Phe Val Ser Ser Ala Met Ala Tyr Asp His Tyr Val Asp Ile His Ser
                           120
                                                125
Leu Leu Pro Xaa Asn Val Met Ser Gln Glu Leu Cys His Val Leu Val
    130
                      135
```

```
Ala Ile Pro Tyr Leu Tyr Ser Thr Phe Gln Ala Leu Met Val Thr Ile
145
                    150
                                        155
Lys Ile Phe Ile Leu Ala Phe Tyr Gly Ser Asn Val Ile Ser Tyr Phe
                                     170
                165
                                                         175
Tyr Cys Xaa Asp Val Ser Leu Leu Ala Met Val Asp Ser Asn Ala Xaa
            180
                                185
Gly Ile Glu Met Leu Ile Thr Leu Phe Ser Val Leu Asn Leu Ile Phe
                            200
Phe Leu Leu Val Val Leu Met Ser Ser Met Leu Ile Leu Leu Thr Val
                                            220
                        215
Cys Xaa Met His Ser Ala Gly Glu Gln Xaa Lys Thr Phe Phe Thr Tyr
                    230
                                        235
Val Ser Cys Leu Ile Val Val Val Phe Cys Gly Phe Leu Tyr Phe
                245
                                    250
Met Tyr Leu Gln Leu Lys Phe Ser Ser Phe Phe Phe Asp Asn Asn Lys
                                265
            260
                                                    270
Met Thr Ser Met Phe Ser Ser Leu Val Ile Thr Met Leu Tyr His Leu
        275
                            280
                                                285
Val Cys Ser Val Lys Asn Lys Gly Ser Lys Lys Asn Ala Phe Tyr Ser
                        295
Phe Phe Met Lys Gln Xaa Lys Leu Cys Asn Leu Met Val
                    310
<210> 2132
<211> 318
<212> PRT
<213> Homo sapien (7249282-5-5312-7865)
<220>
<221> VARIANT
<222> (1)...(318)
<223> Xaa = Any Amino Acid
<400> 2132
Met Lys Pro Thr Ile Gln Met Ala Ser Gly Asn Leu Thr Trp Val Thr
                                    10
Glu Phe Ile Leu Val Gly Val Ser Asp Asp Pro Glu Leu Gln Ile Pro
            20
                                25
Leu Phe Leu Val Phe Leu Val Leu Tyr Leu Leu Thr Val Ala Gly Asn
                            40
                                                45
Leu Gly Ile Ile Thr Leu Thr Ser Val Asp Pro Gln Leu Gln Thr Pro
                        55
Met Tyr Phe Phe Leu Xaa His Leu Ala Ile Ile Asn Leu Cys Asn Ser.
                    70
                                        75
Thr Val Val Ala Pro Lys Met Leu Val Asn Phe Leu Val Thr Lys Lys
               85
                                    90
Thr Ile Ser Tyr Tyr Gly Cys Ala Ala Gln Leu Gly Gly Phe Leu Val
           100
                               105
Phe Ile Val Ala Glu Ile Phe Thr Leu Ala Ala Met Ala Tyr Asp Arg
                            120
                                                125
Tyr Val Ala Ile Trp Ser Pro Leu Leu Tyr Ala Val Val Ser Pro
                        135
                                            140
Lys Val Cys Arg Leu Leu Val Ser Leu Thr Tyr Leu Gln Ser Leu Ile
                    150
                                        155
Thr Ala Leu Thr Val Ser Ser Cys Val Phe Ser Val Ser Tyr Cys Ser
               165
                                    170
                                                        175
Ser Asn Ile Ile Asn His Phe Tyr Cys Asp Asp Val Pro Leu Leu Ala
                               185
                                                   190
Leu Ser Cys Ser Asp Thr Tyr Ile Pro Glu Thr Ala Val Phe Ile Phe
                            200
```

Ser Gly Thr Asn Leu Leu Phe Ser Met Ile Val Val Leu Ile Ser Tyr

```
210
                        215
                                            220
Phe Asn Ile Val Ile Thr Ile Leu Arg Ile Arg Ser Ser Glu Gly Arg
                                       235
                    230
Gln Lys Ala Phe Ser Thr Cys Ala Ser His Met Ile Ala Val Val
                245
                                    250
Phe Tyr Gly Thr Leu Leu Phe Met Tyr Leu Gln Pro Arg Ser Asn His
                                265
Ser Leu Asp Thr Asp Lys Met Ala Ser Val Phe Tyr Thr Leu Val Ile
                            280
Pro Val Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asn Val Lys
                    295
                                            300
Asp Ala Leu Lys Arg Phe Leu Asp Asn Pro Cys Arg Ser Leu
                    310
                                        315
<210> 2133
<211> 279
<212> PRT
<213> Homo sapien (7264174-61-26274-29247)
<220>
<221> VARIANT
<222> (1)...(279)
<223> Xaa = Any Amino Acid
<400> 2133
Leu Pro Pro Leu Phe Phe Arg Val Phe Val Ile Leu Phe Val Ser Leu
                                    10
Leu Phe Val Lys Leu Cys Ile Leu Phe Leu Ile Ile Leu Leu Val Lys
           20
                                25
Phe Leu Leu Lys Thr Lys Ile Ala Met Thr Tyr Phe Thr Tyr Leu Ser
                            40
                                                45
Asn Tyr Lys Leu Lys Ala Xaa Asn Ser Ile Asp Phe His Ile His Met
                       55
                                            60
Phe Val Tyr Val Tyr Ile Met Asn Lys Leu Val His Leu Lys Tyr Glu
                   70
Thr Leu Thr Ser Leu Pro Phe Phe Trp Asn Ser Leu Gly Cys Leu Asp
               85
                                   90
Thr Ser Xaa Phe Cys Phe Thr Phe Tyr Val Thr Tyr Ser Ser Leu Ile
                               105
Val Ile Asn Met Leu Tyr Phe Leu Ala Val Leu Ala Lys Ser Ser Phe
                            120
                                                125
Ile Leu Cys Phe Asn Ser Leu Ser Val Asn Cys Asp Thr Phe Cys Val
                        135
Trp Leu Ser Cys Phe Gly Ile Val Tyr Leu Asp Val His Pro Ile Ala
                 · 150
                                       155
His Cys Leu Phe Leu Lys Arg Leu Phe Lys Cys Tyr Val Phe Leu Xaa
               165
                                    170
Ser Leu Val Phe Cys Phe Met His Ala Leu Leu Pro Xaa Thr Leu Lys
                                185
Asn Thr Cys Phe Asp Val Leu Phe Ile Phe Ile Cys Glu Lys Ser Leu
                            200
Leu Ala Asn Met Ser Phe Val Thr Ile Val Ser Ser Leu Ile Leu Leu
                       215
                                            220
Thr Asn Xaa Glu Ile Ile Ser Phe Ser Ser Val Ile Leu Cys Gly Thr
                   230
                                       235
Ile His Leu Asn Leu Ser Ser Phe Phe Leu His Arg Phe Phe Ile Phe
              245
                                   250
Phe Phe Cys Leu Lys Ser Ala Asn Ile Tyr Leu Asn Val Asp Leu Leu
           260
                               265
Ser Ile Ile Leu Thr Leu Val
       275
```

```
<210> 2134
<211> 314
<212> PRT
<213> Homo sapien (7283250-10-5473-8590)
<400> 2134
Met Glu Arg Gly Asn Trp Thr Leu Val Thr Glu Phe Ile Leu Val Gly
                                   10
1
                5
Ile Pro Thr Thr Arg Ala Leu Gly Gly Leu Leu Phe Val Ile Phe Tyr
                            . 25
                                                   30
           20
Pro Ala Tyr Leu Val Thr Val Leu Gly Asn Thr Leu Ile Ile Leu
                           40
                                               45
Ile Leu Val Asp Tyr Arg Leu His Ser Pro Met Tyr Phe Phe Leu Ser
                                           60
                       55
Asn Leu Ser Phe Ser Glu Thr Leu Thr Ile Thr Cys Ala Val Pro Lys
                                       75
                   70
Met Leu Glu Gly Phe Pro Ser Glu Arg Lys Ser Ile Thr Ser Gly Glu
                                   90
Cys Ser Ala Gln Ser Tyr Phe Tyr Phe Leu Ser Gly Cys Thr Glu Phe
           100
                               105
Ile Pro Phe Ala Val Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Ser
                          120
                                              125
       115
Pro Leu Gln Tyr Pro Ala Ile Met Thr Ser Ser Leu Cys Ala His Leu
                                           140
                       135
Val Ile Leu Ser Trp Val Gly Gly Phe Leu Leu Met Leu Pro Ser Thr
                   150
                                       155
Ile Leu Lys Ala Gly Leu Pro His Cys Gly Pro Asn Val Ile Glu His
                                   170
              165
Phe Phe Cys Asp Ser Ala Pro Leu Leu His Leu Ala Cys Ala Asp Ile
                                                   190
                               185
           180
Arg Ala Ile Glu Leu Leu Asp Phe Leu Ser Ser Leu Val Leu Ile Leu
                                               205
                           200
       195
Ser Ser Leu Ser Leu Thr Val Val Ser Tyr Val Tyr Ile Ile Ser Thr
                                           220
                       215
Ile Leu Lys Ile Pro Ser Gly Gln Gly Gln Arg Lys Ala Phe Ala Thr
                                       235
                   230
Cys Ala Ser His Phe Thr Val Val Ser Val Gly Tyr Gly Ile Ser Ile
                                   250
                                                       255
               245
Phe Val Tyr Val His Pro Ser Gln Lys Ser Ser Leu His Leu Asn Lys
                               265
           260
Ile Leu Phe Ile Leu Ser Ser Ile Ile Thr Pro Leu Leu Asn Pro Phe
                          280
                                              285
       275
Val Phe Ser Leu Trp Asn Glu Pro Met Lys Asp Ala Leu Lys Asp Ala
                      295
Val Gly Arg Arg Thr Glu Leu Ala Gln Arg
                   310
<210> 2135
<211> 309
<212> PRT
<213> Homo sapien (7283250-11-11521-16137)
Met Ala Asn Leu Thr Ile Val Thr Glu Phe Ile Leu Met Gly Phe Ser
                                    10
1
Thr Asn Lys Asn Met Cys Ile Leu His Ser Ile Leu Phe Leu Leu Ile
           20
                               25
                                                   3.0
Tyr Leu Cys Ala Leu Met Gly Asn Val Leu Ile Ile Met Ile Thr Thr
                                                45
       35
                            40
Leu Asp His His Leu His Thr Pro Val Tyr Phe Phe Leu Lys Asn Leu
```

```
55
Ser Phe Leu Asp Leu Cys Leu Ile Ser Val Thr Ala Pro Lys Ser Ile
                                       75
Ala Asn Ser Leu Ile His Asn Asn Ser Ile Ser Phe Leu Gly Cys Val
                                   90
Ser Gln Val Phe Leu Leu Leu Ser Ser Ala Ser Ala Glu Leu Leu
                               105
           100
Leu Thr Val Met Ser Phe Asp Arg Tyr Thr Ala Ile Cys His Pro Leu
                           120
His Tyr Asp Val Ile Met Asp Arg Ser Thr Cys Val Gln Arg Ala Thr
                                          140
                       135
Val Ser Trp Leu Tyr Gly Gly Leu Ile Ala Val Met His Thr Ala Gly
                                       155
                   150
Thr Phe Ser Leu Ser Tyr Cys Gly Ser Asn Met Val His Gln Phe Phe
                                   170
               165
Cys Asp Ile Pro Gln Leu Leu Ala Ile Ser Cys Ser Glu Asn Leu Ile
                               185
           180
Arg Glu Ile Ala Leu Ile Leu Ile Asn Val Val Leu Asp Phe Cys Cys
                                               205
                           200
Phe Ile Val Ile Ile Ile Thr Tyr Val His Val Phe Ser Thr Val Lys
                                           220
                       215
Lys Ile Pro Ser Thr Glu Gly Gln Ser Lys Ala Tyr Ser Ile Cys Leu
                   230
                                      235
Pro His Leu Leu Val Val Leu Phe Leu Ser Thr Gly Phe Ile Ala Tyr
                                   250
Leu Lys Pro Ala Ser Glu Ser Pro Ser Ile Leu Asp Ala Val Ile Ser
           260
                               265
Val Phe Tyr Thr Met Leu Pro Pro Thr Phe Asn Pro Ile Ile Tyr Ser
                280
      275
Leu Arg Asn Lys Ala Ile Lys Val Ala Leu Gly Met Leu Ile Lys Gly
                       295
Lys Leu Thr Lys Lys
<210> 2136
<211> 313
<212> PRT
<213> Homo sapien (7283250-5-1-3004)
<400> 2136
Met Glu Lys Arg Asn Leu Thr Val Val Arg Glu Phe Val Leu Leu Gly
Leu Pro Ser Ser Ala Glu Gln Gln His Leu Leu Ser Val Leu Phe Leu
                               25
Cys Met Tyr Leu Ala Thr Thr Leu Gly Asn Met Leu Ile Ile Ala Thr
                                               45
                          40
Ile Gly Phe Asp Ser His Leu His Ser Pro Met Tyr Phe Phe Leu Ser
                       55
                                           60
Asn Leu Ala Phe Val Asp Ile Cys Phe Thr Ser Thr Thr Val Pro Gln
                                       75
                    70
Met Val Val Asn Ile Leu Thr Gly Thr Lys Thr Ile Ser Phe Ala Gly
                                    90
Cys Leu Thr Gln Leu Phe Phe Phe Val Ser Phe Val Asn Met Asp Ser
                               105
           100
Leu Leu Cys Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
                           120
Pro Leu His Tyr Thr Ala Arg Met Asn Leu Cys Leu Cys Val Gln Leu
                       135
Val Ala Gly Leu Trp Leu Val Thr Tyr Leu His Ala Leu Leu His Thr
                    150
                                       155
Val Leu Ile Ala Gln Leu Ser Phe Cys Ala Ser Asn Ile Ile His His
```

```
170
Phe Phe Cys Asp Leu Asn Pro Leu Leu Gln Leu Ser Cys Ser Asp Val
                                185
            180
Ser Phe Asn Val Met Ile Ile Phe Ala Val Gly Gly Leu Leu Ala Leu
                            200
Thr Pro Leu Val Cys Ile Leu Val Ser Tyr Gly Leu Ile Phe Ser Thr
                        215
                                            220
Val Leu Lys Ile Thr Ser Thr Gln Gly Lys Gln Arg Ala Val Ser Thr
                   230
                                       235
Cys Ser Cys His Leu Ser Val Val Val Leu Phe Tyr Gly Thr Ala Ile
               245
                                   250
Ala Val Tyr Phe Ser Pro Ser Ser Pro His Met Pro Glu Ser Asp Thr
           260
                               265
Leu Ser Thr Ile Met Tyr Ser Met Val Ala Pro Met Leu Asn Pro Phe
                           280
                                               285
Ile Tyr Thr Leu Arg Asn Arg Asp Met Lys Arg Gly Leu Gln Lys Met
                      295
                                           300
Leu Leu Lys Cys Thr Val Phe Gln Gln
                  310
<210> 2137
<211> 310
<212> PRT
<213> Homo sapien (7283250-6-1-1725)
<220>
<221> VARIANT
<222> (1)...(310)
<223> Xaa = Any Amino Acid
<400> 2137
Met Val Asn Phe Thr His Val Ser Glu Phe Val Leu Leu Gly Phe Gln
                                   10
Gly Gly Pro Gly Met Gln Ala Met Leu Phe Leu Ile Phe Leu Ile Leu
                                25
Tyr Gly Ile Ala Val Val Gly Asn Leu Gly Met Ile Val Ile Ile Trp
                            40
Val Asp Ala His Leu His Thr Pro Met Tyr Ala Phe Leu Gln Ser Leu
                       55
Ser Leu Leu Asp Ile Cys Tyr Ser Ser Thr Ile Ala Pro Arg Ala Leu
                  70
                                       75
Ala Asn Ser Met Gln Glu Asp His Thr Ile Ser Phe Gly Gly Cys Ala
                                   90
Ala Gln Phe Phe Leu Ser Leu Phe Gly Ile Thr Glu Ala Phe Leu
                               105
Leu Ala Ala Met Ala Tyr Asp Arg Phe Ile Ala Ile Cys Asn Pro Leu
                           120
                                              125
Leu Tyr Ser Val Ser Met Ser His Gln Val Cys Val Leu Leu Ile Ser
                      135
                                          140
   130
Gly Ser Tyr Leu Trp Gly Val Val Asn Ala Ile Ala Gln Thr Thr Met
                   150
                                       155
Thr Phe Arg Leu Pro Phe Cys Gly Ser Asn Glu Ile Asn Asp Phe Phe
               165
                                   170
Cys Asp Val Pro Pro Leu Leu Ser Leu Ser Cys Ser Asp Thr Phe Ile
                               185
                                                   190
Asn Gln Leu Val Leu Cly Leu Cys Gly Ser Ile Ile Val Ser Thr
                           200
Phe Leu Ile Val Leu Val Ser Tyr Ile Tyr Ile Ile Ser Thr Ile Leu
                       215
                                           220
Arg Ile Pro Thr Met Gln Gly Arg Xaa Lys Ala Phe Ser Thr Cys Ala
                                       235
```

```
Ser His Leu Thr Gly Val Cys Leu Phe Phe Gly Thr Val Phe Phe Met
                245
                                   250
Tyr Ala Gln Pro Ser Ala Ile Phe Phe Met Glu Gln Ser Lys Ile Val
            260
                                265
Ser Ile Phe Tyr Thr Met Val Ile Pro Met Leu Asn Pro Leu Ile Tyr
                            280
Ser Leu Arg Asn Lys Glu Val Lys Gln Ala Leu Arg Arg Ser Met Gln
                    295
Lys Leu Ser Leu Xaa Ser
305
<210> 2138
<211> 320
<212> PRT
<213> Homo sapien (7321521-20-4435-9278)
<220>
<221> VARIANT
<222> (1)...(320)
<223> Xaa = Any Amino Acid
<400> 2138
Met Ser Ser Arg Leu Met Asn Val Phe Ser Met Glu Thr Ile Asn Phe
                                   10
Val Ser Cys Leu Ile Leu Met Gly Phe Pro Ser Ser Pro Glu Met Gln
        20
                                25
Leu Leu Tyr Phe Gly Leu Phe Ser Val Ala Tyr Thr Leu Thr Pro Met
      35
                           40
                                                45
Gly Asn Ala Ala Ile Val Cys Ala Val Trp Xaa Asp Gln His Leu His
                        55
Thr Pro Met Tyr Thr Leu Leu Gly Asn Phe Ser Leu Leu Glu Ile Trp
                                        75
Tyr Val Thr Ala Thr Lys Leu Leu Ala Asn Phe Leu Ser Thr Ser Lys
                                    90
Ser Ile Ser Phe Met Ser Cys Phe Ala Gln Phe Tyr Phe Phe Ser Leu
           100
                                105
Gly Tyr Asp Glu Gly Phe Phe Leu Cys Ile Thr Ala Phe Asp Arg Tyr
                           120
                                                125
Leu Ala Ile Cys Arg Pro Leu Arg Tyr Pro Cys Ile Met Thr Lys Gln
                        135
Val Cys Thr Gly Leu Ile Ile Phe Ala Trp Ser Cys Val Phe Val Ile
                   150
                                        155
Phe Leu Thr Leu Val Ile Leu Ile Ser Gln Leu Ser Tyr Cys Gly Pro
                                    170
Asn Ile Ile Asn His Phe Ile Cys Asp Pro Val Pro Leu Lys Met Leu
           180
                                185
Ser Cys Ser Glu Asp Ile Ile Ile Thr Gln Leu Ile Tyr Ser Thr Phe
                           200
                                                205
Asn Ser Val Phe Ile Ile Gly Thr Phe Leu Phe Ile Leu Cys Ser Tyr
                       215
                                           220
Ala Leu Val Ile Leu Ala Ile Ile Arg Met Pro Ser Glu Ala Gly Lys
                   230
                                       235
Arg Lys Ala Phe Ser Thr Cys Ala Ser His Leu Ala Val Val Thr Leu
               245
                                   250
Phe Tyr Gly Ser Ile Met Val Met Tyr Val Ser Pro Gly Ser Ala His
           260
                                265
                                                    270
Pro Ala Lys Asn Glu Lys Ile Ile Thr Leu Phe Phe Ser Val Ile Thr
                           280
Pro Leu Cys Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Glu Met Lys
                       295
                                            300
Asp Tyr Leu Arg Lys Ile Phe Arg Thr Gly Lys Asp Val Asn Lys Ile
```

```
310
                                           315
                                                               320
  <210> 2139
  <211> 331
  <212> PRT
  <213> Homo sapien (7321521-21-4479-8486)
  <220>
  <221> VARIANT
  <222> (1)...(331)
  <223> Xaa = Any Amino Acid
  <400> 2139
 Met Glu Ser Glu Asn Arg Thr Val Ile Arg Glu Phe Ile Leu Leu Arg
  1
 Leu Thr Gln Phe Arg Asp Ile Xaa Leu Leu Val Phe Val Leu Val Leu
                                  25
 Ile Phe Tyr Phe Phe Ile Leu Pro Gly Asn Phe Leu Ile Ile Phe Thr
         35
                              40
 Ile Arg Ser Asp Pro Gly Leu Thr Ala Pro Leu Tyr Leu Phe Leu Gly
                                              60
 Asn Leu Ala Phe Leu Asp Ala Ser Tyr Ser Phe Ile Val Ala Pro Lys
                     70
                                          75
 Met Leu Val Asp Phe Leu Ser Glu Lys Lys Val Ile Ser Tyr Arg Gly
                                      90
 Cys Ile Thr Gln Leu Phe Phe Leu His Phe Leu Gly Gly Gly Gly Gly
             100
                                 105
                                                      110
 Leu Leu Leu Val Val Met Ala Phe Asp Arg Tyr Ile Thr Ile Cys Leu
        115
                             120
 Pro Leu Gln Tyr Ser Thr Val Met Asn Ser Arg Ala Cys Tyr Ala Met
                         135
                                             140
 Met Leu Ala Leu Trp Leu Gly Gly Phe Val His Ser Ile Ile Gln Val
                     150
                                         155
 Val Leu Ile Ile Arg Leu Pro Phe Cys Gly Pro Asn Gln Leu Asp Asn
                 165
                                     170
 Phe Phe Cys Asp Val Arg Gln Val Ile Lys Leu Ala Cys Thr Asp Met
            180
                                 185
                                                     190
 Phe Val Val Glu Leu Leu Met Val Phe Asn Ser Gly Leu Met Thr Leu
                             200
                                                 205
Met Cys Phe Leu Gly Leu Leu Ala Ser Tyr Ala Val Ile Leu Cys Arg
                        215
                                             220
Ile Arg Ala Ser Ser Ser Glu Ala Lys Asn Lys Ala Met Ser Thr Cys
                    230
                                        235
Thr Thr His Ile Ile Val Ile Phe Phe Met Phe Gly Pro Gly Ile Phe
                245
                                    250
Ile Tyr Thr Cys Pro Phe Arg Ala Phe Pro Ala Asp Lys Val Val Ser
                                265
                                                     270
Leu Phe His Thr Val Ile Leu Pro Leu Leu Asn Pro Val Ile Tyr Thr
        275
                            280
                                                 285
Leu His Asn Gln Glu Val Lys Ala Ser Met Lys Lys Val Phe Asn Lys
                        295
                                            300
His Ile Ala Xaa Lys Arg Ala Lys Lys Lys Arg Ile Lys Ile Asp Cys
                    310
                                        315
Lys Phe Tyr Leu Lys Leu Ile Cys Leu Phe Pro
                325
<210> 2140
<211> 313
<212> PRT
<213> Homo sapien (7321521-22-8611-12801)
```

```
<400> 2140
Met Glu Thr Ala Asn Tyr Thr Lys Val Thr Glu Phe Val Leu Thr Gly
                                    10
                5
Leu Ser Gln Thr Pro Glu Val Gln Leu Val Leu Phe Val Ile Phe Leu
                                25
Ser Phe Tyr Leu Phe Ile Leu Pro Gly Asn Ile Leu Ile Cys Thr
Ile Ser Leu Asp Pro His Leu Thr Ser Pro Met Tyr Phe Leu Leu Ala
                        55
                                            60
Asn Leu Ala Phe Leu Asp Ile Trp Tyr Ser Ser Ile Thr Ala Pro Glu
                    70
                                        75
Met Leu Ile Asp Phe Phe Val Glu Arg Lys Ile Ile Ser Phe Asp Gly
                                    90
Cys Ile Ala Gln Leu Phe Phe Leu His Phe Ala Gly Ala Ser Glu Met
                                105
Phe Leu Leu Thr Val Met Ala Phe Asp Leu Tyr Thr Ala Ile Cys Arg
                            120
                                               125
Pro Leu His Tyr Ala Thr Ile Met Asn Gln Arg Leu Cys Cys Ile Leu
                                            140
                        135
Val Ala Leu Ser Trp Arg Gly Gly Phe Ile His Ser Ile Ile Gln Val
                    150
                                        155
Ala Leu Ile Val Arg Leu Pro Phe Cys Gly Pro Asn Glu Leu Asp Ser
                                    170
Tyr Phe Cys Asp Ile Thr Gln Val Val Arg Ile Ala Cys Ala Asn Thr
           180
                                185
                                                   190
Phe Pro Glu Glu Leu Val Met Ile Cys Ser Ser Gly Leu Ile Ser Val
       195
                           200
Val Trp Leu Ile Ala Leu Leu Met Ser Tyr Ala Phe Leu Leu Ala Leu
                       215
                                           220
Phe Lys Lys Leu Ser Gly Ser Gly Glu Asn Thr Asn Arg Ala Met Ser
                                       235
                    230
Thr Cys Tyr Ser His Ile Thr Ile Val Val Leu Met Phe Gly Pro Ser
               245
                                    250
Ile Tyr Ile Tyr Ala Arg Pro Phe Asp Ser Phe Ser Leu Asp Lys Val
            260
                                265
                                                    270
Val Ser Val Phe Asn Thr Leu Ile Phe Pro Leu Arg Asn Pro Ile Ile
                                                285
        275
                            280
Tyr Thr Leu Arg Asn Lys Glu Val Lys Ala Ala Met Arg Lys Leu Val
                        295
Thr Lys Tyr Ile Leu Cys Lys Glu Lys
                    310
<210> 2141
<211> 134
<212> PRT
<213> Homo sapien (7321637-16-2663-3767)
<220>
<221> VARIANT
<222> (1)...(134)
<223> Xaa = Any Amino Acid
<400> 2141
His Met Val Asp Ile Leu Asn Arg Gln Thr Leu Leu Tyr Leu Val Leu
                                   10
Gly Leu Trp Leu Glu His Val Leu Pro Ser Ser Phe Gly Thr Val Met
           20
                               25
Val Pro Leu Cys Gly Pro Arg Met Thr Ala Arg Leu Leu Phe Leu Pro
                           40
                                               45
Val Pro Leu Ser Ala Glu Asn Glu Leu Arg Arg Ala Leu Leu Ser Thr
```

```
Glu Ala His Thr Ile Ser Leu Val Gly Gln Arg Leu Ala Ile Pro Cys
                   70
Asn Asn Ile Ser Xaa Phe Ile Tyr Leu Ile Lys Asn Arg Asn Leu Gly
                                  90
              85
Gln Gln Pro Ala Tyr Ser Thr Cys Trp Asp His Xaa Leu Leu Val Ser
                              105
                                                  110
Leu Phe Tyr Phe Lys Thr Phe His Ile Xaa Thr His Gly Ser Thr Ser
                          120
       115
Phe Thr Phe Ile Lys Leu
  130
<210> 2142
<211> 315
<212> PRT
<213> Homo sapien (7327747-39-1-1406)
<400> 2142
Met Glu Thr Trp Val Asn Gln Ser Tyr Thr Asp Gly Phe Phe Leu Leu
                                   10
1
Gly Ile Phe Ser His Ser Thr Ala Asp Leu Val Leu Phe Ser Val Val
                               25
           20
Met Ala Val Phe Thr Val Ala Leu Cys Gly Asn Val Leu Leu Ile Phe
                           40
Leu Ile Tyr Met Asp Pro His Leu His Thr Pro Met Tyr Phe Phe Leu
                       55
                                           60
Ser Gln Leu Ser Leu Met Asp Leu Met Leu Val Cys Thr Asn Val Pro
                                       75
                   70
Lys Met Ala Ala Asn Phe Leu Ser Gly Arg Lys Ser Ile Ser Phe Val
              85
                                  90
Gly Cys Gly Ile Gln Ile Gly Leu Phe Val Cys Leu Val Gly Ser Glu
                                                  110
                               105
Gly Leu Leu Gly Leu Met Ala Tyr Asp Arg Tyr Val Ala Ile Ser
                                               125
                           120
       115
His Pro Leu His Tyr Pro Ile Leu Met Asn Gln Arg Val Cys Leu Gln
                       135
                                           140
Ile Thr Gly Ser Ser Trp Ala Phe Gly Ile Ile Asp Gly Leu Ile Gln
                                       155
                   150
Met Val Val Val Met Asn Phe Pro Tyr Cys Gly Leu Arg Lys Val Asn
                                   170
               165
His Phe Phe Cys Glu Met Leu Ser Leu Leu Lys Leu Ala Cys Val Asp
                                                   190
                               185
Thr Ser Leu Phe Glu Lys Val Ile Phe Ala Cys Cys Val Phe Met Leu
                                               205
                           200
Leu Phe Pro Phe Ser Ile Ile Val Ala Ser Tyr Ala Arg Ile Leu Gly
                                           220
                      215
Thr Val Leu Gln Met His Ser Ala Gln Ala Trp Lys Lys Ala Leu Ala
                   230
                                       235
Thr Cys Ser Ser His Leu Thr Ala Val Thr Leu Phe Tyr Gly Ala Ala
                                   250
               245
Met Phe Ile Tyr Leu Arg Pro Arg His Tyr Arg Ala Pro Ser His Asp
                                                   270
                              265
          260
Lys Val Ala Ser Ile Phe Tyr Thr Val Leu Thr Pro Met Leu Asn Pro
                          280
                                              285
Leu Ile Tyr Ser Leu Arg Asn Arg Glu Val Met Gly Ala Leu Arg Lys
                      295
Gly Leu Asp Arg Cys Arg Ile Gly Ser Gln His
                   310
<210> 2143
<211> 308
<212> PRT
```

```
<213> Homo sapien (7328761-32-2018-4643)
<220>
<221> VARIANT
<222> (1)...(308)
<223> Xaa = Any Amino Acid
<400> 2143
Met Lys Ile Asn Asp Ser Ser Gly Glu Asp Phe Ile Leu Val Gly Phe
Ser Glu Tyr Pro Gln Ala Glu Phe Ile Leu Ser Leu Phe Val Ser Gly
            20
Phe Tyr Thr Met Thr Phe Thr Gly Asn Thr Ala Ile Ile Leu Val Ser
                            40
Leu Leu Asp Tyr Arg Leu Arg Thr Pro Met Tyr Phe Phe Leu Arg Lys
                        55
Leu Ser Phe Leu Asp Met Cys Phe Thr Thr Cys Ile Val Leu Gln Met
                                        75
                    70
Leu Val Asn Ile Trp Gly Glu Ser Lys Lys Val Ser Tyr Val Gly Cys
                                    90
Met Val Gln Tyr Ser Val Ala Leu Ala Leu Gly Ser Thr Glu Cys Val
                                105
Leu Leu Ala Ile Met Ala Val Asp Arg Tyr Val Ala Val Arg Trp Pro
                                                125
                            120
Leu His Tyr Val Thr Ile Met His Gln Gln Ile Cys His Phe Leu Ala
                                            140
                        135
Ala Leu Ser Trp Phe Ser Gly Leu Ala Asn Ser Leu Phe His Ser Ser
                                        155
                    150
Leu Thr Thr Ile Leu Pro Leu Cys Gly His Arg Arg Val Asp His Phe
                                    170
Phe Cys Glu Val Leu Leu Ile Val Lys Leu Ser Cys Val Asp Thr Gly
                                                    190
                                185
            180
Pro Thr Glu Leu Lys Met Leu Ile Ala Arg Val Ile Ile Leu Ala Leu
                            200
        195
Pro Val Cys Thr Ile Leu Thr Ser Tyr Ala Cys Ile Ala Arg Ala Val
                        215
                                            220
Leu Arg Leu Gln Ser Ala Glu Gly Gln Gln Lys Ala Phe Gly Thr Cys
                    230
                                        235
Ala Ser His Leu Met Val Val Leu Leu Phe Tyr Gly Thr Ile Met Phe
                                    250
                245
Met Cys Leu Gln Leu Lys Ser Asn Tyr Ser Gln Ile Gln Gly Lys Leu
                                265
Leu Pro Leu Val Tyr Thr Ile Ala Ala Pro Thr Xaa Asn Pro Leu Ile
                            280
Tyr Ala Leu Arg Asn Lys Val Val Lys Arg Ala Ile Gly Lys Leu Ile
                        295
Trp Lys Asp Ser
305
<210> 2144
<211> 101
<212> PRT
<213> Homo sapien (7341899-1-693-1026)
<221> VARIANT
<222> (1)...(101)
<223> Xaa = Any Amino Acid
<400> 2144
Gln Met Leu Thr Asp Trp Trp Gly Pro Asn Arg Thr Thr Ser Tyr Val
```

```
10
Asn Cys Thr Ile Gln Phe Leu Val Ser Leu Xaa Cys Met Cys His Tyr
                               25
Ile Ile Ser Tyr Asn Tyr Phe Ile Ile Cys His Pro Leu Xaa Tyr
                           40
Leu Leu Ile Met Asn Leu Tyr Leu Leu Leu Asn Leu Thr Leu Ile Leu
                        55
Glu Gly Xaa Phe Ile His Phe Trp His His Val Tyr Ser Ile Leu Lys
                   70
                                       75
Ile Pro Arg Met Lys Lys Asn Leu Gln Ile Ile Pro Leu Ile Gly
               85
                                  90
Cys Cys Leu Ala Glu
           100
<210> 2145
<211> 326
<212> PRT
<213> Homo sapien (7341899-24-747-1936)
<400> 2145
Met Glu Arg Ala Asn Asp Ser Thr Phe Ser Gly Phe Ile Leu Leu Gly
         5
                                   10
Phe Ser Asn Arg Pro Gln Leu Glu Thr Ala Leu Phe Val Val Ile Leu
                               25
        20
Ile Ile Tyr Phe Leu Ser Phe Leu Gly Asn Gly Thr Ile Ile Leu Leu
       35
                           40
Ser Ile Val Asp Pro Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser
Asn Leu Ser Phe Met Asp Leu Cys Leu Thr Thr Cys Thr Val Pro Gln
                   70
                                       75
Thr Leu Val Asn Phe Lys Gly Lys Asp Lys Thr Ile Thr Tyr Gly Gly
                                   90
Cys Val Thr Gln Leu Phe Ile Ala Leu Gly Leu Gly Ser Glu Cys
                               105
Val Leu Leu Ser Ala Met Ala Tyr Asp Arg Tyr Ala Ala Val Cys Arg
                           120
                                               125
Ser Leu His Tyr Met Val Ser Met His Pro Gln Leu Cys Leu Gln Leu
                       135
                                          140
Val Val Thr Trp Leu Thr Gly Phe Gly Asn Ser Val Ile Gln Thr
                   150
                                       155
Ala Leu Thr Met Thr Leu Pro Leu Cys Asp Lys Asn Gln Val Asp His
               165
                                   170
Phe Phe Cys Glu Val Pro Val Met Leu Lys Leu Ser Cys Thr Asn Thr
           180
                               185
                                                   190
Ser Ile Asn Glu Ala Glu Ile Phe Ala Val Ser Val Phe Phe Leu Val
                           200
                                               205
Val Pro Leu Ser Leu Ile Leu Ala Ser Tyr Gly His Ile Thr His Ala
                                           220
                       215
Val Leu Lys Ile Lys Ser Ala Gln Gly Arg Gln Lys Ala Phe Gly Thr
                   230
                                       235
Cys Gly Ser His Leu Leu Val Val Ile Ile Phe Phe Gly Thr Leu Ile
              245
                                   250
Ser Met Tyr Leu Gln Pro Pro Ser Ser Tyr Ser Gln Asp Val Asn Lys
           260
                               265
Ser Ile Ala Leu Phe Tyr Thr Leu Val Thr Pro Leu Leu Asn Pro Leu
                          280
                                               285
Ile Tyr Thr Leu Arg Asn Lys Glu Val Lys Gly Ala Thr Lys Lys Thr
                      295
                                           300
```

Ser Gly Glu Asp Ile Ala Cys Met Arg Lys Leu Thr Gln Gly Leu Gln

Phe Gln Thr Phe Val His

PCT/US00/27582

```
<210> 2146
<211> 155
<212> PRT
<213> Homo sapien (7341899-6-1-567)
<220>
<221> VARIANT
<222> (1)...(155)
<223> Xaa = Any Amino Acid
<400> 2146
Met Lys Lys Asn Leu Gln Asp Asn Ser Leu His Val Leu Leu Ala
 1
                                    10
Met Leu Lys Thr Val Phe Leu Asp Ala Thr Ile Glu Glu Met Ser Val
                                25
Phe Val Leu Asn Asn Val Asn Val Leu Ile Cys Leu Ile Ser Asn Phe
Thr Cys Tyr Gly Tyr Ile Ala Gly Ala Leu Arg Met Asn Thr Ser Asn
    50
Xaa Ile Arg Ser Lys Leu Arg Asn Gln Tyr His His His His Arg
                    70
Cys His Phe Ile Ile Asp Ser Ile Phe Tyr Gly Ile Ile Val Xaa Met
                85
                                    90
Leu Leu Gln Asp Gly Asn Asn Ser Ser Gln Asp Gln Glu Arg Phe Phe
            100
                                105
Ile Leu Phe Tyr Thr Ile Leu Thr Pro Ser Leu Lys Leu Leu Val Tyr
                            120
Leu Leu Arg Asn Lys Asp Ile Lys Asp Ile Ser Arg Arg Ile Leu Arg
                       135
Phe Gly Arg Glu Ser Ser Lys Met Lys Gly Asn
                   150
<210> 2147
<211> 318
<212> PRT
<213> Homo sapien (7341900-14-7037-9080)
<220>
<221> VARIANT
<222> (1)...(318)
<223> Xaa = Any Amino Acid
<400> 2147
Met Ala Glu Ser Gly Thr Thr Val Thr Glu Phe Phe Leu Arg Gly Phe
                                    10
Arg Leu Lys Ala Glu Leu Gln Ile Gly Leu Phe Phe Val Phe Leu Val
                                25
Ile Phe Leu Ile Thr Met Gly Gly Asn Leu Gly Met Ile Val Leu Met
                            40
Leu Ile Gln Thr Asp Pro Arg Leu Gln Thr Pro Met Tyr Phe Phe Leu
Ser His Leu Ser Phe Leu Asp Ile Cys Tyr Ser Ser Val Ile Gly Pro
                   70
                                        75
Gln Leu Leu Glu Thr Leu Ala Thr Asp Lys Met Ile Ile Thr Tyr Glu
                                    90
Arg Cys Ala Ser Gln Phe Phe Phe Phe Thr Leu Cys Ala Ser Ile Glu
                                105
Cys Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Val Cys
                            120
```

```
Asn Pro Leu Leu Tyr Ala Ile Val Met Thr Pro Lys Thr Arg Leu Ala
                       135
Leu Leu Ala Gly Ala Tyr Ser Gly Ala Ile Val Asn Ser Val Ile Cys
                    150
                                        155
Thr Gly Cys Thr Phe Ser Ile Ser Phe Ser Lys Ser Asn His Val Asp
                                    170
Phe Phe Cys Asp Leu Pro Pro Leu Leu Lys Leu Ala Cys Ser Glu
                                185
Thr Arg Pro Arg Glu Trp Val Ile Tyr Leu Ser Ala Phe Leu Val Ile
        195
                            200
                                                205
Thr Thr Ser Ile Ser Val Ile Leu Thr Ser Tyr Leu Phe Ile Ile Gln
                                            220
                        215
Ser Val Leu Lys Ile Arg Thr Ala Gly Gly Arg Ala Lys Thr Phe Ser
                   230
                                        235
Thr Cys Ala Ser His Met Thr Ala Leu Thr Leu Phe Phe Gly Thr Leu
                245
                                    250
Ile Phe Ile Tyr Leu Lys Gly Asn Met Gly Glu Ser Leu Glu Glu Asp
            260
                               265
Lys Ile Val Ser Ile Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro
                           280
                                                285
Met Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys Glu Ala Leu Lys Lys
                        295
Val Phe Asn Arg Ile Arg Val Ser Gln Ala Glu Xaa Leu Leu
<210> 2148
<211> 317
<212> PRT
<213> Homo sapien (7341900-15-17952-19084)
Met Gln Pro Tyr Thr Lys Asn Trp Thr Gln Val Thr Glu Phe Val Met
Met Gly Phe Ala Gly Ile His Glu Ala His Leu Leu Phe Phe Ile Leu
           20
                                25
Phe Leu Thr Met Tyr Leu Phe Thr Leu Val Glu Asn Leu Ala Ile Ile
                            40
                                                45
Leu Val Val Gly Leu Asp His Arg Leu Arg Arg Pro Met Tyr Phe Phe
                        55
Leu Thr His Leu Ser Cys Leu Glu Ile Trp Tyr Thr Ser Val Thr Val
                    70
                                        75
Pro Lys Met Leu Ala Gly Phe Ile Gly Val Asp Gly Gly Lys Asn Ile
               85
                                    90
Ser Tyr Ala Gly Cys Leu Ser Gln Leu Phe Ile Phe Thr Phe Leu Gly
           100
                               105
Ala Thr Glu Cys Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val
                           120
                                               125
Ala Ile Cys Met Pro Leu His Tyr Gly Ala Phe Val Ser Trp Gly Thr
                       135
Cys Ile Arg Leu Ala Ala Cys Trp Leu Val Gly Phe Leu Thr Pro
                   150
                                       155
Ile Leu Pro Ile Tyr Leu Leu Ser Gln Leu Thr Phe Cys Gly Pro Asn
```

235

170

Val Ile Asp His Phe Ser Cys Asp Ala Ser Pro Leu Leu Ala Leu Ser 185 Cys Ser Asp Val Thr Trp Lys Glu Thr Val Asp Phe Leu Val Ser Leu

Ile Val Trp Thr Leu Leu His Ile Arg Ser Ala Ala Glu Arg Trp Lys

200 Ala Val Leu Leu Ala Ser Ser Met Val Ile Ala Val Ser Tyr Gly Asn

;

215

230

165

195

```
Ala Phe Ser Thr Cys Ala Ala His Leu Thr Val Val Ser Leu Phe Tyr
                 245
                                    250
Gly Thr Leu Phe Phe Met Tyr Val Gln Thr Lys Val Thr Ser Ser Ile
                                 265
Asn Phe Asn Lys Val Val Ser Val Phe Tyr Ser Val Val Thr Pro Met
                             280
Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Gly Ala
                        295
Leu Gly Arg Val Phe Ser Leu Asn Phe Trp Lys Gly Gln
                    310
<210> 2149
<211> 314
<212> PRT
<213> Homo sapien (7341900-16-17098-20843)
<400> 2149
Met Ala Lys Asn Asn Leu Thr Arg Val Thr Glu Phe Ile Leu Met Gly
                                     10
Phe Met Asp His Pro Lys Leu Glu Ile Pro Leu Phe Leu Val Phe Leu
Ser Phe Tyr Leu Val Thr Leu Leu Gly Asn Val Gly Met Ile Met Leu
        35
Ile Gln Val Asp Val Lys Leu Tyr Thr Pro Met Tyr Phe Phe Leu Ser
His Leu Ser Leu Leu Asp Ala Cys Tyr Thr Ser Val Ile Thr Pro Gln
                    70
                                        75
Ile Leu Ala Thr Leu Ala Thr Gly Lys Thr Val Ile Ser Tyr Gly His
                85
                                     90
Cys Ala Ala Gln Phe Phe Leu Phe Thr Ile Cys Ala Gly Thr Glu Cys
            100
                                105
Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Ala Ala Ile Arg Asn
                            120
                                                125
Pro Leu Leu Tyr Thr Val Ala Met Asn Pro Arg Leu Cys Trp Ser Leu
                        135
                                            140
Val Val Gly Ala Tyr Val Cys Gly Val Ser Gly Ala Ile Leu Arg Thr
                    150
                                        155
Thr Cys Thr Phe Thr Leu Ser Phe Cys Lys Asp Asn Gln Ile Asn Phe
                165
                                    170
Phe Phe Cys Asp Leu Pro Pro Leu Leu Lys Leu Ala Cys Ser Asp Thr
            180
                                185
                                                    190
Ala Asn Ile Glu Ile Val Ile Ile Phe Phe Gly Asn Phe Val Ile Leu
                            200
                                                205
Ala Asn Ala Ser Val Ile Leu Ile Ser Tyr Leu Leu Ile Ile Lys Thr
                        215
Ile Leu Lys Val Lys Ser Ser Gly Gly Arg Ala Lys Thr Phe Ser Thr
                    230
                                        235
Cys Ala Ser His Ile Thr Ala Val Ala Leu Phe Phe Gly Ala Leu Ile
                245
                                    250
Phe Met Tyr Leu Gln Ser Gly Ser Gly Lys Ser Leu Glu Glu Asp Lys
           260
                                265
                                                    270
Val Val Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu
                            280
                                                285
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Asp Ala Phe Arg Lys Val
                        295
                                            300
Ala Arg Arg Leu Gln Val Ser Leu Ser Met
                    310
<210> 2150
<211> 311
<212> PRT
```

```
<213> Homo sapien (7341900-6-1691-2778)
<220>
<221> VARIANT
<222> (1)...(311)
<223> Xaa = Any Amino Acid
<400> 2150
Glu Lys Asn Leu Ile Ser Met Asn Gly Phe Met Asn Phe Thr Asp Tyr
                                   10
Pro Glu Leu Glu Met Pro Leu Phe Leu Val Phe Leu Ser Cys Phe Leu
           20
                                25
Ala Ile Ile Leu Arg Asn Met Glu Trp Val Ile Leu Thr Gln Val Asn
Val His Leu Phe Thr Pro Ile Tyr Phe Phe Leu Thr Asn Val Thr Leu
                        55
                                           60
Trp Asp Thr Ser Val Ile Met Pro Gln Ile Leu Ala Ile Leu Ala Thr
                                       75
                    70
Gly Lys Thr Thr Ile Ser Tyr Val Pro Leu Ile Lys Ala Met Arg Ser
                                   90
               85
Phe Phe Ile Cys Val Gly Thr Xaa Cys Phe Leu Pro Thr Ala Met
                               105
                                                110
Thr Ile Ser Ser His Cys Pro Thr Leu Gln Ala Met Asn Phe Lys Thr
                           120
                                               125
       115
Cys Trp Gly Phe Phe Leu Val Gly Ile Cys Cys Cys Thr Cys Trp Val
                       135
                                           140
Leu Met Val Asn Val Val Asn Ala Tyr Thr Xaa Gly Leu Ser Gly Ala
                                       155
145
                    150
Thr Phe Asn Thr Ile Cys Thr Phe Ala Arg Phe Phe Cys Asp Asp Asn
                                   170
               165
Xaa Ile Lys Phe Cys His Ile Leu Pro Leu Leu Lys Leu Ile Xaa Asn
                                185
           180
Thr Ser Gly Asn Ser Lys Ile Ile Ile Val Ile Leu Thr Ala Phe Met
                           200
                                               205
Ile Ile Ala Gly Thr Arg Val Ile Leu Ile Ser Tyr Leu Leu Ile Ile
                                           220
                       215
Arg Ala Leu Arg Met Lys Ser Ser Ser Gly Arg Ser Gln Xaa Phe Tyr
                                       235
                   230
Pro Ser Thr Cys Ala Ser His Leu Thr Ala Met Thr Phe Phe Gly Ile
                                   250
                                                      255
               245
Pro Ile Phe Arg His Val Lys Tyr Leu Arg Xaa Ile Thr Asp Arg Arg
                               265
           260
Gln Val Gly Ile Met Thr Cys Thr Ile Phe Ile Pro Met Leu Glu Leu
                           280
                                               285
  · 275
Leu Ile Gln Ser Leu Lys Lys Asp Ile Gln Val Ala Phe Lys Lys Ala
                       295
Ile Gly Asn Phe Trp Val Phe
<210> 2151
<211> 306
<212> PRT
<213> Homo sapien (7406632-1-90980-93013)
<400> 2151
Met Glu Gly Lys Asn Gln Thr Asn Ile Ser Glu Phe Leu Leu Gly
1.
Phe Ser Ser Trp Gln Gln Gln Gln Val Leu Phe Ala Leu Phe Leu
                               25
Cys Leu Tyr Leu Thr Gly Leu Phe Gly Asn Leu Leu Ile Leu Leu Ala
        35
                            40
```

```
Ile Gly Ser Asp His Cys Leu His Thr Pro Met Tyr Phe Phe Leu Ala
                      55
Asn Leu Ser Leu Val Asp Leu Cys Leu Pro Ser Ala Thr Val Pro Lys
Met Leu Leu Asn Ile Gln Thr Gln Thr Gln Thr Ile Ser Tyr Pro Gly
                                    90
Cys Leu Ala Gln Met Tyr Phe Cys Met Met Phe Ala Asn Met Asp Asn
                               105
Phe Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
                           120
                                               125
Pro Leu His Tyr Ser Thr Ile Met Ala Leu Arg Leu Cys Ala Ser Leu
                                            140
                       135
Val Ala Ala Pro Trp Val Ile Ala Ile Leu Asn Pro Leu Leu His Thr
                  150
                                       155
Leu Met Met Ala His Leu His Phe Cys Ser Asp Asn Val Ile His His
                                   170
               165
Phe Phe Cys Asp Ile Asn Ser Leu Leu Pro Leu Ser Cys Ser Asp Thr
                               185
           180
Ser Leu Asn Gln Leu Ser Val Leu Ala Thr Val Gly Leu Ile Phe Val
                            200
Val Pro Ser Val Cys Ile Leu Val Ser Tyr Ile Leu Ile Val Ser Ala
                       215
Val Met Lys Val Pro Ser Ala Gln Gly Lys Leu Lys Ala Phe Ser Thr
                                        235
                   230
Cys Gly Ser His Leu Ala Leu Val Ile Leu Phe Tyr Gly Ala Ile Thr
                                    250
Gly Val Tyr Met Ser Pro Leu Ser Asn His Ser Thr Glu Lys Asp Ser
                                265
Ala Ala Ser Val Ile Phe Met Val Val Ala Pro Val Leu Asn Pro Phe
                                                285
                            280
Ile Tyr Ser Leu Arg Asn Asn Glu Leu Lys Gly Thr Leu Lys Lys Thr
                       295
    290
Leu Ser
305
<210> 2152
<211> 314
<212> PRT
<213> Homo sapien (7407927-19-1-4216)
<400> 2152
Met Glu Gly Phe Asn Tyr Ser Arg Val Ser Glu Phe Met Leu Leu Gly
                                    10
Leu Thr Asp Ser Pro Glu Leu Gln Ile Phe Phe Ser Val Val Phe Ser
            20
Val-Phe Tyr Leu Met Thr Met Leu Gly Asn Cys Leu Ile Leu Leu Thr
Val Leu Ser Thr Ser His Leu His Ser Arg Met Tyr Phe Leu Leu Ser
                                            60
Asn Met Ser Ile Asp Met Cys Leu Ser Ser Phe Ala Thr Pro Lys Met
                                        75
                    70
Ile Met Asp Phe Phe Ala Leu Arg Lys Thr Ile Ser Phe Glu Gly Cys
                                    90
                85
Ile Ser Gln Ile Phe Phe Leu His Leu Phe Asn Gly Thr Glu Ile Val
                                105
            100
Leu Leu Ile Ser Met Ser Phe Asp Arg Tyr Ile Ala Ile Cys Lys Pro
                           120
       115
Leu His Tyr Ser Thr Ile Met Ser Gln Arg Val Cys Val Glu Leu Val
                       135
                                           140
Ala Val Ser Cys Trp Thr Val Gly Phe Leu His Thr Met Ser Gln Leu
                                        155
```

```
Val Phe Ala Leu Tyr Leu Pro Phe Cys Val Pro Asn Val Val Asp Ser
                                    170
                165
Phe Phe Cys Asp Leu Pro Leu Val Ile Gln Leu Ala Cys Ile Asp Ile
            180
                                185
Tyr Val Leu Gly Thr Ser Met Ile Ser Thr Ser Gly Val Ile Ala Leu
                                                205
                            200
Ile Ser Phe Leu Leu Leu Thr Ser Tyr Ile Ile Val Leu Asn Ile
                                            220
                       215
Val Arg Asp Tyr Ser Ser Thr Gly Ser Ser Lys Ala Leu Ser Thr Cys
                                        235
                   230
Thr Ala His Phe Ile Val Val Leu Met Phe Phe Gly Pro Cys Ile Phe
                                    250
                                                        255
               245
Ile Tyr Val Trp Pro Ser Thr Asn Phe Leu Val Asp Lys Ile Leu Ser
                                                   270
                                265
            260
Val Phe Tyr Thr Ile Phe Thr Pro Phe Leu Asn Pro Leu Ile Tyr Thr
                                               285
       275
                           280
Leu Arg Asn Gln Glu Val Lys Thr Ala Met Lys Lys Lys Leu Asn Ile
                       295
Gln Tyr Phe Ser Leu Gly Lys Thr Ala Pro
                   310
<210> 2153
<211> 117
<212> PRT
<213> Homo sapien (7407927-23-3086-3824)
<220>
<221> VARIANT
<222> (1)...(117)
<223> Xaa = Any Amino Acid
<400> 2153
Ser Ile Thr Glu Ala Leu Cys Leu Lys Tyr Val His Leu Asn Asn Lys
                 5
                                    10
Glu Met Tyr Phe Met Tyr Leu Gly Lys Asn Arg Ser Arg Ile Ile Asn
                                25
           20
Val Cys Ser Leu Val Leu Gln Ile Ile Thr Thr Ile Ile Leu Ile Leu
                                                45
Pro Ser Pro Trp Leu Ser Leu Ile Ile Ser Gly Thr Phe Trp Ile Ile
                                            60
                        55
Xaa Pro Leu His Ser Phe Pro His Gln Ile Ile Xaa Asn Ile Asn Thr
                   70
Ala Thr Glu Cys Thr Ile Ser Lys Leu Leu Leu Tyr His Leu Gly Ser
                                   90
Lys Leu Phe Asn Val Lys Ala Gln Phe Ser Thr Xaa Leu Leu Pro Asn
                                105
           100
Glu Leu Tyr Val Leu
      115
<210> 2154
<211> 338
<212> PRT
<213> Homo sapien (7407958-12-642-1844)
<220>
<221> VARIANT
<222> (1)...(338)
<223> Xaa = Any Amino Acid
<400> 2154
Met Ile Ser Phe Leu Val Pro Gly Leu Met Glu Glu Glu Asn Gln Arg
```

```
10
Gly Val Val His Phe His Phe His Phe Phe Ser Thr Asp Leu Val Val
                               25
Ala Ser Phe Ile Ile Val Ala Leu Met Leu His Leu Arg Ser Leu Val
                           40
Gly His Phe Thr Phe Gly Pro Thr Val Trp Gln Asp Pro Phe Leu His
                                           60
Ile Pro Met Tyr Leu Phe Leu Phe Ser Leu Ala Leu Thr Met Leu Glu
                   70
                                       75
Ile Gly Tyr Ser Thr Asn Ile Ser Pro Pro Thr Leu Ala Thr Val Leu
               85
                                   90
Tyr Met Gly Lys Met Leu Ile Ser Leu Pro Gly Tyr Gly Thr Gln Met
                               105
           100
Leu Phe Val Ile Leu Leu Arg Gly Ser Glu Cys Val Leu Leu Ala Val
                                                125
                           120
Met Ala Tyr Asp Arg Tyr Ile Thr Ile Cys His Pro Phe Asn Tyr Asn
                       135
                                            140
Leu Ile Met Ser Gly Xaa Leu Cys Gly Gln Met Thr Leu Gly Ser Leu
                                        155
                    150
Arg Leu Gly Phe Leu Leu Ser Leu Phe Leu Thr Met Leu Ile Xaa His
                                    170
Pro Pro Phe Cys Gly Leu Asp Glu Thr Tyr His Phe Cys Asp Met
                                185
Pro Thr Ala Ser Arg Leu Val Cys Ala Asp Thr Thr Val His Glu Ser
                           200
                                                205
Ala Leu Xaa Leu Pro Cys Gly His His His Pro Leu Pro Ser Ser
                                            220
                       215
Leu Ile Cys Leu Pro Tyr Gly Cys Leu Ala Ala Thr Ile Leu Arg Met
                    230
                                        235
His Ser Ala Lys Arg Lys His Xaa Ala Phe Ser Thr Ser Ser Ser His
                245
                                    250
Leu Ile Val Val Leu Leu Lys Tyr Trp Cys Cys Ile Leu Ile Cys Leu
                               265
Cys Pro Ser Ser Ser Tyr Ser Pro Glu Glu Gly Trp Glu Val Ser Leu
                           280
                                                285
Val His Met Phe Ile Leu Pro Val Trp Asn Pro Leu Ile Tyr Ser Val
                                           300
                       295
Trp Asn Gln Asp Val Thr Asp Ala Val Glu Arg Leu Val Ala Arg Met
                  310
                                       315
Ser Leu Xaa Leu Thr Ala Arg Asn Ile Pro Ser Xaa Lys Ile Phe Pro
              325
                                   330
Xaa Leu
<210> 2155
<211> 314
<212> PRT
<213> Homo sapien (7467565-10-15924-18962)
<400> 2155
Met Ser Asn Glu Asp Met Glu Gln Asp Asn Thr Thr Leu Leu Thr Glu
Phe Val Leu Thr Gly Leu Thr Tyr Gln Pro Glu Trp Lys Met Pro Leu
                                25
Phe Leu Val Phe Leu Val Ile Tyr Leu Ile Thr Ile Val Trp Asn Leu
Gly Leu Ile Ala Leu Ile Trp Asn Asp Pro Gln Leu His Ile Pro Met
Tyr Phe Phe Leu Gly Ser Leu Ala Phe Val Asp Ala Trp Ile Ser Ser
```

Thr Val Thr Pro Lys Met Leu Val Asn Phe Leu Ala Lys Asn Arg Met

75

```
90
Ile Ser Leu Ser Glu Cys Met Ile Gln Phe Phe Ser Phe Ala Phe Gly
                                105
Gly Thr Thr Glu Cys Phe Leu Leu Ala Thr Met Ala Tyr Asp Arg Tyr
                           120
                                                125
Val Ala Ile Cys Lys Pro Leu Leu Tyr Pro Val Ile Met Asn Asn Ser
                        135
                                            140
Leu Cys Ile Arg Leu Leu Ala Phe Ser Phe Leu Gly Gly Phe Leu His
                    150
                                        155
Ala Leu Ile His Glu Val Leu Ile Phe Arg Leu Thr Phe Cys Asn Ser
                165
                                    170
Asn Ile Ile His His Phe Tyr Cys Asp Ile Ile Pro Leu Phe Met Ile
            180
                                185
                                                    190
Ser Cys Thr Asp Pro Ser Ile Asn Phe Leu Met Val Phe Ile Leu Ser
        195
                            200
                                                205
Gly Ser Ile Gln Val Phe Thr Ile Val Thr Val Leu Asn Ser Tyr Thr
                        215
                                            220
Phe Ala Leu Phe Thr Ile Leu Lys Lys Ser Val Arg Gly Val Arg
                   230
                                       235
Lys Ala Phe Ser Thr Cys Gly Ala His Leu Leu Ser Val Ser Leu Tyr
                245
                                    250
Tyr Gly Pro Leu Ile Phe Met Tyr Leu Arg Pro Ala Ser Pro Gln Ala
            260
                               265
                                                    270
Asp Asp Gln Asp Met Ile Asp Ser Val Phe Tyr Thr Ile Ile Ile Pro
                           280
                                               285
Leu Leu Asn Pro Ile Ile Tyr Ser Leu Arg Asn Lys Gln Val Ile Asp
                       295
Ser Phe Thr Lys Met Val Lys Arg Asn Val
                    310
<210> 2156
<211> 320
<212> PRT
<213> Homo sapien (7533967-9-17699-19044)
<220>
<221> VARIANT
<222> (1)...(320)
<223> Xaa = Any Amino Acid
<400> 2156
Gly Val Gly Leu Xaa Lys Leu Xaa Trp Gln Ile Ile Phe Ser Gly Asp
                                    10
Ser Phe Ser Thr Trp Glu Met Phe Ser Leu Ser Ile Leu Gln Leu Pro
            20
Xaa Met Tyr Thr Val Ala Leu Ser Gly Thr Ser Ile Leu Ile Phe Leu
    :35
                            40
Ile Xaa Thr Asp Phe Xaa Val His Thr Ser Leu Tyr Ser Phe Xaa Val
                       55
Leu Ile Asp Ile Ala Ile Ser Val Val Lys Ile Gly Ile Glu Val Phe
                                       75
Ser Gly Lys Ile Asn Phe Ser His Thr Gly Cys Gly Thr Gln Ile Phe
                                   90
Phe Phe Leu Thr Ala Gly Ile Phe Lys Tyr Val Leu Leu Thr Tyr Met
           100
                               105
Ala Tyr Asp His Asn Val Ala Ile Cys Asp Leu Arg Xaa Pro Thr Phe
                           120
                                               125
Met Ser Asp Gln Val Phe Xaa Gln Trp Ala Val Glu Ser Trp Ile Gly
                       135
                                            140
Gly Lys Leu Ser Ser Leu Ala His Thr Ile Tyr Ile Phe His Leu Phe
                                       155
```

```
Ser Tyr Lys Ala Lys Glu Ile Ser His Leu Trp Pro Lys Leu Phe Xaa
                165
                                    170
Ser Ser Val Gly Ile Pro Tyr Ile Gln Asn Asp Val Phe Phe Thr
                               185
 Ile Ile Thr Phe Leu Phe Thr Leu Leu Pro Leu Thr Leu Ser
                            200
                                                205
Ser Lys Leu Ile Val Phe Thr Ile Leu His Met Asn Ser Ser Asn Gly
                        215
                                            220
Gly Ala Lys Ser Trp His Thr Tyr Cys Phe His Leu Ser Val Leu Ile
                   230
                                        235
Pro Cys Cys Gly Gln Ala Ile Phe Val Tyr Met Thr Ser Ser Phe
               245
                                    250
Xaa Thr Val Asn Lys Tyr Gln Thr Met Ser Val Leu Thr Ala Xaa Leu
            260
                               265
Tyr Pro Leu Lys Pro Leu Ile Asp Ile Leu Lys Asn Ala Glu Val
                           280
                                               285
Ala Gly Ala Trp Ser Lys Phe Leu Xaa Lys Lys Ala Leu Lys Ser Gln
                       295
                                           300
His Leu Ile Thr Arg Ser Cys Glu Asn Lys Xaa Thr Thr Glu Gln Ser
                   310
<210> 2157
<211> 196
<212> PRT
<213> Homo sapien (7534025-1-1-1622)
<400> 2157
Met Gly Tyr Asp Arg Tyr Met Ala Ile Cys Asn Pro Leu Arg Tyr Ser
Val Leu Met Gly His Gly Val Cys Met Gly Leu Met Ala Ala Ala Cys
           20
                               25
Ala Cys Gly Phe Thr Val Ser Leu Val Thr Thr Ser Leu Val Phe His
                           40
                                               45
Leu Pro Phe His Ser Ser Asn Gln Leu His His Phe Phe Cys Asp Ile
                        55
Ser Pro Val Leu Lys Leu Ala Ser Gln His Ser Gly Phe Ser Gln Leu
                   70
Val Ile Phe Met Leu Gly Val Phe Ala Leu Val Ile Pro Leu Leu Leu
               85
                                   90
Ile Leu Val Ser Tyr Ile Arg Ile Ile Ser Ala Ile Leu Lys Ile Pro
                               105
                                                   110
Ser Ser Val Gly Arg Tyr Lys Thr Phe Ser Thr Cys Ala Ser His Leu
                           120
Ile Val Val Thr Val His Tyr Ser Cys Ala Ser Phe Ile Tyr Leu Arg
                       135
                                           140
Pro Lys Thr Asn Tyr Thr Ser Ser Gln Asp Thr Leu Ile Ser Val Ser
                   150
                                       155
Tyr Thr Ile Leu Thr Pro Leu Phe Asn Pro Met Ile Tyr Ser Leu Arg
               165
                                  170
Asn Lys Glu Phe Lys Ser Ala Leu Arg Arg Thr Ile Gly Gln Thr Phe
           180
                              185
Tyr Pro Leu Ser
      195
<210> 2158
<211> 307
<212> PRT
<213> Homo sapien (7534025-11-6732-9742)
<220>
<221> VARIANT
```

<222> (1)...(307) <223> Xaa = Any Amino Acid <400> 2158 Met Ile Thr Glu Phe Ile Leu Ile Gly Phe Ser Asn Leu Gly Asp Leu 10 5 Gln Ile Leu Leu Phe Phe Ile Phe Leu Leu Val Tyr Leu Thr Thr Leu 20 Met Ala Asn Thr Thr Ile Met Thr Val Ile His Leu Asp Arg Ala Leu 40 His Thr Pro Met Tyr Phe Phe Leu Phe Val Leu Ser Cys Ser Glu Thr 55 Cys Tyr Thr Leu Val Ile Val Pro Lys Met Leu Thr Asn Leu Leu Ser 75 70 Ala Ile Pro Thr Ile Ser Phe Ser Gly Cys Val Val Gln Leu Tyr Leu 85 90 Phe Val Gly Leu Ala Cys Thr Asn Cys Phe Leu Ile Ala Val Met Gly 105 Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu Asn Tyr Thr Leu Ile 125 120 115 Val Ser Xaa Ala Thr Cys Met Gln Leu Val Leu Ala Ser Ser Phe Cys 135 140 Gly Phe Leu Thr Ser Val Ile Val Asn Ile Leu Val Phe Ser Val Leu 155 145 150 Leu Cys Ala Ser Asn Arg Ile Asn His Phe Phe Cys Asp Ile Ser Pro 170 165 Val Ile Lys Leu Gly Cys Thr Asp Thr Asn Leu Lys Glu Met Val Ile 185 Phe Phe Leu Ser Ile Leu Val Leu Leu Val Pro Leu Val Leu Ile Phe 200 205 Ile Ser Tyr Ile Phe Ile Val Ser Thr Ile Leu Lys Ile Ser Ser Val 220 215 Glu Gly Gln Cys Lys Ala Phe Ala Thr Cys Ala Ser His Leu Thr Val 230 235 Val Val Val His Tyr Gly Cys Ala Ser Phe Ile Tyr Leu Arg Pro Thr 245 250 255 Ser Leu Tyr Ser Ser Asp Lys Asp Arg Leu Val Ala Val Thr Tyr Thr 260 265 Val Ile Thr Pro Leu Leu Asn Pro Leu Val Tyr Thr Leu Arg Asn Lys 280 285 Glu Val Lys Met Ala Leu Arg Lys Val Leu Gly Arg Cys Leu Asn Ser 290 295 Lys Thr Val 305 <210> 2159 <211> 321 <212> PRT <213> Homo sapien (7534025-12-11728-15143) <220> <221> VARIANT <222> (1)...(321) <223> Xaa = Any Amino Acid <400> 2159 Gly Thr Lys Ser Ile Lys Leu Thr Ser Leu Ser Glu Phe Leu Leu 10 Glu Phe Ser Ser Leu Glu Glu Ile Gln Gln Ile Leu Phe Leu Val Cys Leu Trp Leu Tyr Leu Ile Val Leu Ser Gly Asn Ile Thr Thr Val Thr

PCT/US00/27582 WO 01/27158

```
45
                           40
Val Ile Arg Leu Asp Gln Ser Leu His Ile Pro Val Tyr Leu Phe Leu
                                           60
               55
Gly Ile Leu Ser Ile Ser Gly Thr Cys Tyr Thr Phe Val Ile Leu Pro
                                       75
                  70
Lys Met Leu Ile Asp Leu Leu Ser Leu Leu Arg Thr Ile Ser Phe Ile
                                  90
              85
Asn Cys Ala Leu Gln Met Phe Phe Phe Leu Gly Phe Ala Val Thr Asn
                               105
          100
Phe Met Phe Leu Gly Met Thr Val Tyr Asp Ser Tyr Val Ala Ile Cys
                           120
His Pro Leu His Tyr Pro Val Leu Thr Ser Trp Gln Ile Cys Lys Gln
                                           140
                       135
Leu Ala Ala Thr Cys Ala Val Ile Val Phe Phe Cys Leu Phe Val Phe
                                       155
                   150
Thr Asp Arg Leu Leu Leu Arg Phe Ser Leu Leu Phe Cys Gly Pro Asn
                                   170
               165
Lys Ile Asn His Tyr Phe Cys Asp Ile Ser Leu Leu Ile Gln Leu Ala
                               185
Cys Thr Asp Thr Tyr Ile Arg Glu Leu Val Ile Phe Ile Gly Gly Ile
                           200
Leu Ala Leu Thr Val Pro Leu Met Phe Ile Cys Ile Ser Tyr Gly Phe
                                           220
                       215
Ile Val His Thr Ile Leu Arg Ile Pro Ser Cys Glu Ser Lys Gln Lys
                                       235
                   230
Ala Ile Ser Thr Cys Ala Ser His Leu Ile Met Val Val His Tyr
                                   250
               245
Gly Cys Ala Ser Phe Val Asn Leu Xaa Pro Ser Ala Lys Xaa Ser Ser
                              265
Ser Lys Xaa Pro Ser Ser Lys Asn Arg Leu Val Thr Val Thr Tyr Thr
                          280
                                               285
Val Val Thr Pro Leu Leu Asn Pro Met Val Tyr Ser Phe Lys Asn Lys
                                           300
                      295
Asn Val Gln Met Ala Ile Trp Lys Val Ile Cys Gln Gly Gly Phe Pro
                  310
Pro
```

<210> 2160

<211> 324

<212> PRT

<213> Homo sapien (7534025-3-4346-5996)

. Met Thr Thr Ile Ile Leu Glu Val Asp Asn His Thr Val Thr Thr Arg 10 Phe Ile Leu Leu Gly Phe Pro Thr Arg Pro Ala Phe Gln Leu Leu Phe 20 25 Phe Ser Ile Phe Leu Ala Thr Tyr Leu Leu Thr Leu Leu Glu Asn Leu 40 Leu Ile Ile Leu Ala Ile His Ser Asp Gly Gln Leu His Lys Pro Met 60 55 Tyr Phe Phe Leu Ser His Leu Ser Phe Leu Glu Met Trp Tyr Val Thr 75 Val Ile Ser Pro Lys Met Leu Val Asp Phe Leu Ser His Asp Lys Ser 85 t.t 90 Ile Ser Phe Asn Gly Cys Met Thr Gln Leu Tyr Phe Phe Val Thr Phe 105 Val Cys Thr Glu Tyr Ile Leu Leu Ala Ile Met Ala Phe Asp Arg Tyr 125 120 Val Ala Ile Cys Asn Pro Leu Arg Tyr Pro Val Ile Met Thr Asn Gln

```
135
Leu Cys Gly Thr Leu Ala Gly Gly Cys Trp Phe Cys Gly Leu Met Thr
                150
                                      155
Ala Met Ile Lys Met Val Phe Ile Ala Gln Leu His Tyr Cys Gly Met
                                  170
               165
Pro Gln Ile Asn His Tyr Phe Cys Asp Ile Ser Pro Leu Leu Asn Val
                               185
                                                   190
Ser Cys Glu Asp Ala Ser Gln Ala Glu Met Val Asp Phe Phe Leu Ala
                          200
                                                205
Leu Met Val Ile Ala Ile Pro Leu Cys Val Val Val Ala Ser Tyr Ala
                       215
                                           220
Ala Ile Leu Ala Thr Ile Leu Arg Ile Pro Ser Ala Gln Gly Arg Gln
                                       235
                   230
Lys Ala Phe Ser Thr Cys Ala Ser His Leu Thr Val Val Ile Leu Phe
               245
                                   250
Tyr Ser Met Thr Leu Phe Thr Tyr Ala Arg Pro Lys Leu Met Tyr Ala
                               265
            260
Tyr Asn Ser Asn Lys Val Val Ser Val Leu Tyr Thr Val Ile Val Pro
                          280
Leu Leu Asn Pro Ile Ile Tyr Cys Leu Arg Asn His Glu Val Lys Ala
                                          300
                       295
Ala Leu Arg Lys Thr Ile His Cys Arg Gly Ser Gly Pro Gln Gly Asn
                                       315
                   310
Gly Ala Phe Ser
<210> 2161
<211> 305
<212> PRT
<213> Homo sapien (7534103-14-4211-5521)
<400> 2161
Met Val Ala Thr Asn Asn Val Thr Glu Ile Ile Phe Val Gly Phe Ser
                                   10
                5
Gln Asn Trp Ser Glu Gln Arg Val Ile Ser Val Met Phe Leu Leu Met
                               25
           20
Tyr Thr Ala Val Val Leu Gly Asn Gly Leu Ile Val Val Thr Ile Leu
                           40
Ala Ser Lys Val Leu Thr Ser Pro Met Tyr Phe Phe Leu Ser Tyr Leu
                       55
                                           60
Ser Phe Val Glu Ile Cys Tyr Cys Ser Val Met Ala Pro Lys Leu Ile
                                       75
                   70
Phe Asp Ser Phe Ile Lys Arg Lys Val Ile Ser Leu Lys Gly Cys Leu
                                                       95
                                   90
               85
Thr Gln Met Phe Ser Leu His Phe Phe Gly Gly Thr Glu Ala Phe Leu
                                                  110
                               105
Leu Met Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                          120
                                               125
       115
His Tyr Met Ala Ile Met Asn Gln Arg Met Cys Gly Leu Leu Val Arg
```

Phe Phe Val Leu Met Ala Ser Tyr Leu Ile Ile Leu His Phe Leu Arg 210 215 220 Ser His Asn Leu Glu Gly Gln His Lys Ala Leu Ser Thr Cys Ala Ser

```
230
                                        235
His Val Thr Val Val Asp Leu Phe Phe Ile Pro Cys Ser Leu Val Tyr
               245
                                   250
Ile Arg Pro Cys Val Thr Leu Pro Ala Asp Lys Ile Val Ala Val Phe
            260
                               265
                                                    270
Tyr Thr Val Val Thr Pro Leu Leu Asn Pro Val Ile Tyr Ser Phe Arg
                           280
                                               285
Asn Ala Glu Val Lys Asn Ala Met Arg Arg Phe Ile Gly Gly Lys Val
                        295
Ile
305
<210> 2162
<211> 301
<212> PRT
<213> Homo sapien (7534103-16-19899-21252)
<220>
<221> VARIANT
<222> (1)...(301)
<223> Xaa = Any Amino Acid
<400> 2162
Met Ala Ser Thr Asn Asn Val Thr Glu Ser Met Ile Thr Ser Leu Phe
                                    10
Gln Asp Pro Ala Val Gln Arg Val Cys Phe Val Val Phe Leu Pro Val
                                25
                                                    30
           20
Tyr Leu Ala Met Glu Val Gly Asn Gly Leu Ile Val Leu Thr Val Ser
                            40
Ile Ser Lys Ser Leu His Ser Pro Val Tyr Phe Phe Leu Ser Tyr Leu
                        55
Ser Leu Met Glu Ile Ser Tyr Phe Thr Val Val Pro Lys Phe Ile Thr
                    70
                                        75
Asp Leu Leu Ala Lys Ile Lys Ala Ile Ser Leu Glu Gly Tyr Leu Ala
                85
                                    90
Gln Ile Phe Leu His Phe Phe Gly Ile Pro Trp Ile Phe Leu Leu Pro
           100
                               105
Leu Met Thr Asn Asp Gln Tyr Met Ala Asn Cys Lys Leu Tyr Tyr Tyr
                           120
                                                125
Thr Thr Ile Met Ser Cys Arg Val Cys His Leu Leu Val Ala Gly Phe
                        135
                                            140
Trp Leu Arg Gly Ile Ile His Ser Met Val Gln Ile Leu Val Ser Val
                    150
                                        155
Gln Leu Phe Phe Cys Gly Pro Asn Met Ile Asp His Ser Phe Cys Asp
                165
                                    170
Leu Gln Val Leu Phe Lys Leu Ala Cys Thr Asp Thr Phe Val Glu Gly
           180
                                185
                                                   190
Val Ile Val Leu Ala Asn Ser Glu Leu Val Ser Val Phe Phe Leu Ile
                                                205
                            200
Leu Val Ser Ser Tyr Ile Ile Leu Val Asn Leu Arg Asn His Ser
                                        220
                       215
Ala Glu Gly Arg Cys Lys Ala Leu Ser Thr Cys Ala Ser Tyr Leu Val
                   230
                                       235
Phe Xaa Thr Cys Ile Phe Leu Tyr Val Xaa Leu Ser Ser Thr Phe Thr
               245
                                   250
Lys Asp Lys Leu Val Ala Val Phe Tyr Val Val Ile Thr Pro Met Leu
                               265
Asn Pro Phe Ile Tyr Thr Leu Gly Asn Ala Glu Met Lys Ile Thr Met
                           280
Arg Arg Leu Leu Gly Arg Thr Val Asn Ser Gly Met Glu
                       295
```

```
<210> 2163
<211> 134
<212> PRT
<213> Homo sapien (7534103-16-5480-6475)
<220>
<221> VARIANT
<222> (1)...(134)
<223> Xaa = Any Amino Acid
<400> 2163
Cys Phe Cys Gly Phe Ala Val Leu Thr Ser Cys Leu Phe Cys Leu Thr
Pro Glu Arg Xaa His Asn Thr Leu Arg Met Ala Leu Gly Ser His Arg
Phe Pro Ser Xaa Pro Ile Lys Lys Asn Tyr Lys Trp Pro His Tyr Gln
                           40
Pro Glu Leu Leu Pro His Trp Ser Ser Lys Thr Glu Arg Ile Cys Ser
                                           60
                       55
Pro Ala Pro Ser Gly Leu Glu Met Leu Arg Asn Ala Lys Pro Leu Gly
                    70
                                        75
Phe Gln Leu Tyr Leu Ile Xaa Asn Glu Gln Ser Arg Leu Ala Pro Gln
Gly Val Pro Gln Lys Thr Xaa Ser Leu Cys Ser Ser Ala Leu Ser Ser
                                105
Tyr Cys Leu Lys Asp Thr Gly Gly Gly Lys Xaa Ser Gly Glu Arg
                            120
Ser Ser Phe Pro Arg Glu
    130
<210> 2164
<211> 307
<212> PRT
<213> Homo sapien (7547121-7-14093-14713)
<220>
<221> VARIANT
<222> (1)...(307)
<223> Xaa = Any Amino Acid
<400> 2164
Leu Ile Leu Ile Ser Leu Xaa Val Leu Ile Ser Xaa Gln Lys Leu Leu
                                    10
Phe Val Thr Cys Leu Val Val Tyr Leu Val Thr Leu Leu Gly Asn Arg
           20
                               25
Ile Gln Ile Ile Pro Thr Leu Leu Val Ser His Leu Tyr Leu Cys His
                            40
                                               45
Gly Asn Pro Ser Phe Leu Asp Ile Gly Leu Thr Ser Ser Phe Thr Pro
                       55
                                            60
Ser Ile Leu Ile Asn Phe Leu Ser Glu Gly Lys Lys Leu Ser Phe Thr
                   70
                                        75
Asp Cys Ile Ile Gln Met Ser Ile Phe Tyr Ser Met Gly Ser Thr Glu
               85
                                    90
Cys Val Leu Leu Ala Val Met Ala Tyr Asp Asn Cys Val Val Ile Ser
                                105
Lys Phe Leu Arg Tyr Pro Leu Ile Ile Asn Lys Val Asn Lys Ile Lys
                            120
                                                125
Lys Val Leu Cys Val Phe Met Ala Thr Val Ser Tyr Glu Leu Gly Phe
                                            140
                       135
Leu Asn Arg Gln Asn Val Leu Ile Val Thr Tyr Ala Met His Phe Cys
```

```
145
                     150
                                        155
 Gly Lys His Ile Ile Asn His Phe Tyr Lys Ile Leu Gln Leu Met Pro
                            170
                165
 Leu Ala Cys Ile Asp Ile Ser Leu Asn Glu Asn Ile Ile Leu Gly
            180
                                185
 Lys Val Asn Phe Ser Phe Thr Leu Leu Pro Phe Gln Phe Phe Ile
                            200
 Phe Ser Phe Leu Tyr Phe His His Leu Cys Cys Ile Glu Ile Asn Ser
                        215
                                            220
 Ala Glu Gly Arg Lys Lys Val Ser Ser Thr Cys Ser Ala His Ile Thr
                    230
                                        235
 Val Val Ile Val Phe His Arg Thr Ile Leu Phe Met Tyr Ile Lys Ser
                245
                                    250
 Thr Ser Asn Gly Thr Thr Ser Glu Lys Leu Val Asp Leu Phe Cys Gly
            260
                                265
 Val Val Met Leu Met Leu Asn Leu Ile Ile Tyr Ser Leu Gly Asn Met
                            280
                                                285
 Glu Val Leu Gly Val Met Lys Lys Leu Ile Ser Met Ser Arg Pro Trp
                        295
Cys Trp Lys
305
<210> 2165
<211> 214
<212> PRT
<213> Homo sapien (7622326-1-2092-6993)
<220>
<221> VARIANT
<222> (1)...(214)
<223> Xaa = Any Amino Acid
<400> 2165
Cys Leu Leu Xaa Leu Tyr Gln Val Cys Leu Leu Thr Arg Asp Pro Ile
                                    10
Leu Gln Asp Leu His Xaa Lys Pro Arg Ile Tyr Cys Ser Pro Cys Leu
                                25
Xaa Val Tyr Ser Leu Gly Leu Asp Arg Xaa Xaa Val Phe Leu Thr Met
                            40
                                                45
Thr Gln Ser Val Leu Trp Asn Glu Pro Val Cys Phe Met Phe Ser Xaa
                                            60
Met Pro Phe Cys Leu Ser Xaa Ile Leu Pro Xaa Thr Tyr Tyr Glu Gln
                    70
Val Val Met Leu Asn Leu Val Cys Ala Asp Ile Thr Tyr Ile Val His
                85
                                    90
Thr Cys Gly Leu Phe Met Ala Phe Ser Val Asp Gly Phe Asp Ile Phe
                               105
Gly Ile Ile His Arg Tyr Gln Thr Leu Gln Ala Val Leu Xaa Leu
                           120
                                                125
Pro Ala Lys Glu Ser Val Pro Lys Val Phe Ser Ile Tyr Ala Phe His
                       135
                                           140
Ile Cys Val Thr Leu Tyr Leu Leu Met Ile Gly Phe Tyr Ser Phe Phe
                   150
                                       155
Ser Cys Cys Phe Ser Tyr His Thr Leu Thr Val Ile Pro Ile Ser Phe
               165
                                   170
Ser Ser Phe Tyr Ser Leu Val Pro Ser Met Phe Asn Thr Ile Thr Cys
           180
                               185
Gly Val Lys Ser Lys His Ile Gln Glu Asn Met Val Gln Arg Phe Cys
       195
                           200
Gly Lys Ile Ser Cys His
```

```
<210> 2166
 <211> 321
 <212> PRT
 <213> Homo sapien (7622326-2-5218-6423)
 <400> 2166
 Met Thr Ile Leu Leu Asn Ser Ser Leu Gln Arg Ala Thr Phe Phe Leu
                                     10
 Thr Gly Phe Gln Gly Leu Glu Gly Leu His Gly Trp Ile Ser Ile Pro
            20
                                 25
 Phe Cys Phe Ile Tyr Leu Thr Val Ile Leu Gly Asn Leu Thr Ile Leu
                             40
 His Val Ile Cys Thr Asp Ala Thr Leu His Gly Pro Met Tyr Tyr Phe
                        55
                                             60
 Leu Gly Met Leu Ala Val Thr Asp Leu Gly Leu Cys Leu Ser Thr Leu
                     70
                                         75
 Pro Thr Val Leu Gly Ile Phe Trp Phe Asp Thr Arg Glu Ile Gly Ile
                85
                                     90
 Pro Ala Cys Phe Thr Gln Leu Phe Phe Ile His Thr Leu Ser Ser Met
            100
                                 105
                                                     110
 Glu Ser Ser Val Leu Leu Ser Met Ser Ile Asp Arg Ser Val Ala Val
                             120
 Cys Asn Pro Leu His Asp Ser Thr Val Leu Thr Pro Ala Cys Ile Val
                        135
                                             140
Lys Met Gly Leu Ser Ser Val Leu Arg Ser Ala Leu Leu Ile Leu Pro
                    150
                                         155
Leu Pro Phe Leu Leu Lys Arg Phe Gln Tyr Cys His Ser His Val Leu
                165
                                     170
Ala His Ala Tyr Cys Leu His Leu Glu Ile Met Lys Leu Ala Cys Ser
            180
                                 185
Ser Ile Ile Val Asn His Ile Tyr Gly Leu Phe Val Val Ala Cys Thr
                            200
                                                 205
Val Gly Val Asp Ser Leu Leu Ile Phe Leu Ser Tyr Ala Leu Ile Leu
                        215
                                             220
Arg Thr Val Leu Ser Ile Ala Ser His Gln Glu Arg Leu Arg Ala Leu
                   230
                                         235
Asn Thr Cys Val Ser His Ile Cys Ala Val Leu Leu Phe Tyr Ile Pro
               245
                                    250
Met Ile Gly Leu Ser Leu Val His Arg Phe Gly Glu His Leu Pro Arg
            260
                                265
                                                    270
Val Val His Leu Phe Met Ser Tyr Val Tyr Leu Leu Val Pro Pro Leu
                            280
                                                285
Met Asn Pro Ile Ile Tyr Ser Ile Lys Thr Lys Gln Ile Arg Gln Arg
                        295
                                            300
Ile Ile Lys Lys Phe Gln Phe Ile Lys Ser Leu Arg Cys Phe Trp Lys
305
                                        315
Asp
<210> 2167
<211> 345
<212> PRT
<213> Homo sapien (7622326-3-3672-5330)
<220>
<221> VARIANT
<222> (1)...(345)
<223> Xaa = Any Amino Acid
<400> 2167
```

```
Met His Leu Pro Asn Ser Ser Glu Ile Ala Ile Thr Thr Phe Phe Leu
                                   10
Ile Gly Ile Pro Gly Leu Glu His Ala His Ile Trp Ile Ser Val Pro
Ile Cys Leu Met Tyr Leu Val Ala Ile Leu Gly Asn Cys Thr Ile Leu
                           40
                                               45
Phe Val Ile Arg Thr Glu Pro Ser Leu His Ala Pro Met Tyr Tyr Phe
                       55
Leu Ser Met Leu Ala Val Ser Asp Leu Gly Leu Ser Leu Ser Tyr Leu
                                       75
                   70
Pro Thr Met Leu Arg Ile Phe Val Phe Asn Ala Thr Gly Ile Ser Ser
                                   90
Asn Ala Arg Phe Ala Gln Glu Phe Phe Ile His Gly Phe Thr Asp Met
          100
                               105
Glu Ser Ser Val Leu Leu Val Met Ser Phe Asp Arg Phe Leu Ala Ile
                           120
                                               125
    115
Cys His Pro Leu Arg Tyr Ile Ser Glu Val Leu Val Ser Cys Ile Leu
                      135
Thr Ser Ala Arg Val Ala Lys Met Gly Leu Leu Phe Leu Ile Lys Arg
                  150
                                       155
Glu Thr Thr Leu Asn Ser Leu Lys Glu Thr Thr Asn Ser Val Leu Leu
               165
                                   170
Val Leu Pro Phe Pro Phe Thr Leu Thr Arg Leu Thr Tyr Cys Arg Lys
                               185
                                                   190
Ser Leu Leu Ser His Ser Tyr Cys Leu His Gln Asp Val Arg Lys Leu
                                               205
                           200
Ala Cys Ser Asp Asn Thr Val Asn Phe Phe Tyr Gly Phe Phe Leu Ala
                       215
                                           220
Leu Cys Met Met Ser Glu Ser Val Phe Ile Thr Val Ser Tyr Val Leu
                   230
                                       235
Ile Leu Lys Thr Ile Met Gly Ile Gly Ser His Arg Glu Arg Leu Lys
               245
                                   250
Ala Leu Asn Thr Cys Val Ser His Ile Cys Ala Val Leu Ile Phe Tyr
                               265
Ala Pro Val Ile Ala Leu Ala Ser Met His Cys Phe Ala Ser Met Asn
                           280
                                               285
Cys Phe Gly Lys His Arg Ser Pro Leu Ala Met Ile Leu Ile Ala Asp
                       295
                                           300
Val Phe Leu Leu Val Pro Pro Leu Met Asn Pro Ile Val Tyr Cys Val
                  310
                                       315
Lys Thr Gln Gln Ile His Glu Lys Val Leu Gly Lys Leu Gly Leu Gln
               325
Gln Arg Cys Gln Xaa Thr Trp Tyr Lys
           340
<210> -2168
<211> 325
<212> PRT
<213> Homo sapien (7622326-4-1-4013)
<220>
<221> VARIANT
<222> (1)...(325)
<223> Xaa = Any Amino Acid
<400> 2168
Leu Thr Met Pro His Leu Ser Asn Thr Thr Ser Glu Phe Pro Ile Phe
                                   10
Leu Leu Thr Gly Phe Pro Gly Leu Glu Ala Phe His Ile Trp Ile Ser
                               25
Ile Pro Phe Phe Leu Leu Ser Thr Val Ala Leu Leu Gly Asn Ser Met
```

```
40
        35
                                                45
 Ile Leu Leu Val Val Ile Leu Glu Pro Asn Leu His Glu Pro Met Tyr
                        55
                                            60
 Cys Phe Leu Phe Met Leu Ser Ala Ala Asp Leu Gly Leu Thr Leu Ser
                    70
                                        75
 Thr Met Pro Thr Thr Leu Ser Val Leu Trp Phe Ser Ala Arg Glu Ile
                                    90
 Ile Leu Asn Ala Cys Ile Ile Gln Leu Phe Phe Leu His Ser Ser Gly
            100
                                105
 Phe Met Glu Ser Ser Val Leu Met Ala Met Ala Phe Asp Arg Phe Val
        115
                           120
                                                125
Ala Ile Cys Arg Pro Leu Arg Tyr Ala Thr Ile Leu Thr Asp Ser Arg
                       135
                                            140
Ile Leu Lys Ile Gly Val Ala Ile Val Leu Arg Thr Leu Ile Ser Leu
                   150
                                       155
Ser Pro Ser Leu Phe Leu Ile Lys Arg Leu Ser Phe Cys Lys Val Asn
                165
                                    170
Val Leu Ser His Ser Tyr Cys Phe His Pro Asp Ala Leu Lys Val Ala
           180
                               185
Cys Ser Asp Ser Arg Met Asn Ser Tyr Gly Gly Leu Ala Val Leu Ile
       195
                           200
                                               205
Leu Val Thr Gly Val Gly Thr Pro Cys Val Ala Leu Ser Tyr Ile Leu
                        215
                                            220
Ile Ile His Ser Val Leu Asn Ile Ile Ser Ser Glu Gly Arg Arg Lys
                    230
                                        235
Ala Phe Asp Thr Cys Gly Ser His Ile Gly Ala Val Ala Val Phe Tyr
                245
                                    250
Ile Pro Trp Val Val Leu Ser Val Val His Arg Phe Phe His Lys Ala
            260
                                265
Ser Pro Tyr Val His Pro Leu Leu Ser Asn Ile Tyr Phe Leu Gly Pro
        275
                           280
Ser Arg Leu Asn Pro Ile Ile Tyr Ser Val Lys Thr Lys Gln Ile Arg
                       295
                                           300
Arg Ala Ile Leu Lys Leu Phe Gln Thr Lys Ser Lys Glu Met Xaa Trp
305 . 310
Gly Leu Phe Phe Leu
             325
<210> 2169
<211> 319
<212> PRT
<213> Homo sapien (7622326-7-11006-13674)
<220>
<221> VARIANT
<222> (1)...(319)
<223> Xaa = Any Amino Acid
<400> 2169
Met Ser Pro Leu Asn Asp Thr Lys Met Glu Val Leu Arg Phe Leu Leu
            5
                                   10
Ile Gly Ile Thr Gly Leu Glu Lys Ser Arg Thr Trp Ile Ser Ile Pro
           20
                               25
Phe Leu Ser Val Tyr Leu Leu Ser Trp Met Gly Asn Phe Thr Val Leu
                           40
Phe Phe Ile Lys Thr Glu Gln Ser Leu His Glu Pro Met Tyr Tyr Leu
                       55
Leu Ser Met Leu Ser Ile Ser Asp Leu Gly Leu Ser Leu Ser Ser Leu
                   70
                                       75
Pro Ile Thr Leu Gly Leu Phe Leu Phe Asp Val His Glu Ile His Ala
               85
```

90

```
Ala Pro Cys Phe Ala Xaa Glu Phe Phe Ile His Leu Phe Thr Val Ser
                                105
Glu Ala Ser Val Leu Ser Val Met Ala Phe Asp Trp Tyr Val Ala Ile
        115
                            120
                                                125
His Ser Pro Leu Arg Tyr Ser Thr Ile Leu Thr Ser Pro Arg Ala Ile
                        135
                                            140
Lys Thr Gly Val Leu Leu Thr Ser Lys Asn Val Leu Leu Ile Leu Pro
                    150
                                        155
Leu Pro Phe Leu Leu Gln Arg Leu Arg Tyr Cys His Gln Asn Leu Leu
                165
                                    170
Ser His Ser Tyr Cys Leu His Gln Asp Val Met Lys Leu Met Cys Ser
            180
                                185
Asp Asn Thr Val Asn Val Val Tyr Gly Leu Cys Ala Gly Leu Ser Thr
                            200
                                                205
Met Leu Asp Leu Val Phe Ile Thr Phe Ser Xaa Ile Met Ile Leu Arg
                        215
                                            220
Ala Val Leu Gly Ile Ala Thr Pro Arg Gln Gln Phe Lys Ala Leu Asn
                    230
                                        235
Thr Cys Ile Ser His Ile Cys Ala Val Leu Ile Phe Tyr Val Pro Met
                245
                                    250
Leu Ser Ala Ala Met Leu His Gln Phe Ala Arg Asp Val Ser Pro Met
            260
                                265
Ile His Val Leu Met Ala Asp Ile Phe Leu Leu Val Pro Pro Leu Leu
        275
                            280
                                                285
Asn Pro Ile Val Tyr Cys Val Lys Thr His Gln Ile Arg Glu Lys Val
                        295
Val Gly Lys Leu Cys Pro Lys Val Ser Xaa Ser Lys Glu Xaa Glu
                    310
```

<210> 2170

<211> 323

<212> PRT

<213> Homo sapien (7622326-8-11210-13439)

<400> 2170

Met Ser Thr Leu Pro Thr Gln Ile Ala Pro Asn Ser Ser Thr Ser Met 10 Ala Pro Thr Phe Leu Leu Val Gly Met Pro Gly Leu Ser Gly Ala Pro 20 25 Ser Trp Trp Thr Leu Pro Leu Ile Ala Val Tyr Leu Leu Ser Ala Leu Gly Asn Gly Thr Ile Leu Trp Ile Ile Ala Leu Gln Pro Ala Leu His 55 Arg Pro Met His Phe Phe Leu Phe Leu Ser Val Ser Asp Ile Gly 70 Leu Val Thr Ala Leu Met Pro Thr Leu Leu Gly Ile Ala Leu Ala Gly 85 90 Ala His Thr Val Pro Ala Ser Ala Cys Leu Leu Gln Met Val Phe Ile 105 His Val Phe Ser Val Met Glu Ser Ser Val Leu Leu Ala Met Ser Ile 120 125 Asp Arg Ala Leu Ala Ile Cys Arg Pro Leu His Tyr Pro Ala Leu Leu 135 140 Thr Asn Gly Val Ile Ser Lys Ile Ser Leu Ala Ile Ser Phe Arg Cys 150 155 Leu Gly Leu His Leu Pro Leu Pro Phe Leu Leu Ala Tyr Met Pro Tyr 165 170 Cys Leu Pro Gln Val Leu Thr His Ser Tyr Cys Leu His Pro Asp Val 185 180 190 Ala Arg Leu Ala Cys Pro Glu Ala Trp Gly Ala Ala Tyr Ser Leu Phe 200 205

. . . . . . . . . .

```
Val Val Leu Ser Ala Met Gly Leu Asp Pro Leu Leu Ile Phe Phe Ser
                                            220
                       215
Tyr Gly Leu Ile Gly Lys Val Leu Gln Gly Val Glu Ser Arg Glu Asp
                                        235
                    230
Arg Trp Lys Ala Gly Gln Thr Cys Ala Ala His Leu Ser Ala Val Leu
                                   250
                245
Leu Phe Tyr Ile Pro Met Ile Leu Leu Ala Leu Ile Asn His Pro Glu
                               265
           260
Leu Pro Ile Thr Gln His Thr His Thr Leu Leu Ser Tyr Val His Phe
                           280
                                                285
       275
Leu Leu Pro Pro Leu Ile Asn Pro Ile Leu Tyr Ser Val Lys Met Lys
                       295
                                            300
Glu Ile Arg Lys Arg Ile Leu Asn Arg Leu Gln Pro Arg Lys Val Gly
                   310
                                        315
Gly Ala Gln
<210> 2171
<211> 328
<212> PRT
<213> Homo sapien (7631097-4-2553-4836)
<220>
<221> VARIANT
<222> (1)...(328)
<223> Xaa = Any Amino Acid
<400> 2171
Met Leu Pro Ser Gln Thr Tyr Val Asn Ile Ser Phe Phe Gln Pro Pro
1
                5
Ala Leu Leu Met Ile Gly Ile Pro Gly Leu Glu Ala Val His Gly Trp
                               25
Leu Ala Ile Pro Phe Ser Ser Met Tyr Thr Val Ala Leu Pro Gly Asn
                           40
Cys Leu Ile Leu Leu Ala Val Lys Arg Asn Pro Ser Leu His Gln Pro
                       55
Met Cys Tyr Phe Leu Ser Met Leu Ala Leu Pro Lys Ala Gly Leu Thr
                                        75
Leu Ser Thr Leu Pro Ile Thr Leu Ala Val Leu Trp Phe Asp His Arg
                                   90
                85
Leu Met Gly Phe Asn Ala Cys Leu Val Gln Met Phe Phe Leu His Ser
                               105
           100
Ser Val Val Glu Ser Ser Val Leu Leu Ala Ile Ser Phe Asp His Phe
                           120
                                               125
Val Ala Ile Ser Asn Pro Leu His Tyr Ala Ala Val Leu Thr Asn Ser
                                            140
                       135
Val Ile Ile Arg Ile Gly Leu Ala Ile Val Ala Arg Ser Tyr Leu Val
                   150
                                        155
Pro Leu Pro Val Pro Phe Pro Val Lys Ser Leu Asn Phe Cys Pro Gly
                                    170
                                                        175
                165
Asp Asn Ile Pro Ser His Ser Phe Cys Phe His Pro Asp Val Met Arg
                                                    190
                               185
Arg Ala Cys Ala Asp Ile Thr Ile Asn Ile Cys Tyr Gly Val Tyr Val
                                                205
                            200
        195
Val Val Ser Thr Gly Gly Leu Asp Ser Leu Leu Ile Phe Leu Ser Tyr
                       215
                                            220
Thr Phe Ile Leu His Thr Val Met Gly Leu Ala Ala Pro Arg Glu Arg
                                        235
Ile Trp Ala Leu Asn Thr Cys Val Ser His Ile Pro Ala Val Phe Val
                                   250
                245
```

Phe Phe Ile Pro Gly Ile Thr Val Ser Met Ile His His Phe Gly Arg

```
260
                                 265
 His Leu Pro His Ile Val His Ala Leu Val Thr Tyr Val Tyr Leu Val
                            280
 Met Pro Ser Val Leu His Pro Ile Ile Tyr Ser Met Lys Ser Lys Pro
                        295
 Ile Arg Glu Ala Ile Leu Arg Met Leu Met Gly Arg Ser Gln Gly Xaa
                    310
                                        315
 Xaa Asn Tyr Lys Ile Leu Xaa Gly
                325
 <210> 2172
 <211> 278
 <212> PRT
 <213> Homo sapien (7631097-7-11130-14291)
<400> 2172
Met Tyr Ala Leu Ala Thr Leu Gly Asn Leu Thr Ile Val Leu Ile Ile
                                     10
Arg Val Glu Arg Arg Leu His Glu Pro Met Tyr Leu Phe Leu Ala Met
                                25
Leu Ser Thr Ile Asp Leu Val Leu Ser Ser Ile Thr Met Pro Lys Met
Ala Ser Leu Phe Leu Met Gly Ile Gln Glu Ile Glu Phe Asn Ile Cys
                        55
Leu Ala Gln Met Phe Leu Ile His Ala Leu Ser Ala Val Glu Ser Ala
                    70
Val Leu Leu Ala Met Ala Phe Asp Arg Phe Val Ala Ile Cys His Pro
                                     90
Leu Arg His Ala Ser Val Leu Thr Gly Cys Thr Val Ala Lys Ile Gly
                                105
Leu Ser Ala Leu Thr Arg Gly Phe Val Phe Phe Pro Leu Pro Phe
                           120
                                                125
Ile Leu Lys Trp Leu Ser Tyr Cys Gln Thr His Thr Val Thr His Ser
                        135
Phe Cys Leu His Gln Asp Ile Met Lys Leu Ser Cys Thr Asp Thr Arg
                   150
                                        155
Val Asn Val Val Tyr Gly Leu Phe Ile Ile Leu Ser Val Met Gly Val
                165
                                    170
Asp Ser Leu Phe Ile Gly Phe Ser Tyr Ile Leu Ile Leu Trp Ala Val
            180
                                185
Leu Glu Leu Ser Ser Arg Arg Ala Ala Leu Lys Ala Phe Asn Thr Cys
                            200
                                                205
Ile Ser His Leu Cys Ala Val Leu Val Phe Tyr Val Pro Leu Ile Gly
                        215
                                            220
Leu Ser Val Val His Arg Leu Gly Gly Pro Thr Ser Leu Leu His Val
                    230
                                        235
Val Met Ala Asn Thr Tyr Leu Leu Leu Pro Pro Val Val Asn Pro Leu
               245
                                    250
Val Tyr Gly Ala Lys Thr Lys Glu Ile Cys Ser Arg Val Leu Cys Met
           260
                               265
Phe Ser Gln Gly Gly Lys
        275
<210> 2173
<211> 319
<212> PRT
<213> Homo sapien (7631097-8-20107-27103)
<400> 2173
Met Leu Gly Pro Ala Tyr Asn His Thr Met Glu Thr Pro Ala Ser Phe
```

```
Leu Leu Val Gly Ile Pro Gly Leu Gln Ser Ser His Leu Trp Leu Ala
                                 25
 Ile Ser Leu Ser Ala Met Tyr Ile Thr Ala Leu Leu Gly Asn Thr Leu
                             40
 Ile Val Thr Ala Ile Trp Met Asp Ser Thr Arg His Glu Pro Met Tyr
                        55
 Cys Phe Leu Cys Val Leu Ala Ala Val Asp Ile Val Met Ala Ser Ser
                     70
 Val Val Pro Lys Met Val Ser Ile Phe Cys Ser Gly Asp Ser Ser Ile
                                     90
 Ser Phe Ser Ala Cys Phe Thr Gln Met Phe Phe Val His Leu Ala Thr
             100
                                 105
 Ala Val Glu Thr Gly Leu Leu Thr Met Ala Phe Asp Arg Tyr Val
                             120
                                                 125
 Ala Ile Cys Lys Pro Leu His Tyr Lys Arg Ile Leu Thr Pro Gln Val
                         135
                                             140
 Met Leu Gly Met Ser Met Ala Val Thr Ile Arg Ala Val Thr Phe Met
                     150
                                         155
 Thr Pro Leu Ser Trp Met Met Asn His Leu Pro Phe Cys Gly Ser Asn
                 165
                                     170
Val Val His Ser Tyr Cys Lys His Ile Ala Leu Ala Arg Leu Ala
            180
                                 185
                                                     190
Cys Ala Asp Pro Val Pro Ser Ser Leu Tyr Ser Leu Ile Gly Ser Ser
                             200
                                                 205
Leu Met Val Gly Ser Asp Val Ala Phe Ile Ala Ala Ser Tyr Ile Leu
                        215
                                             220
Ile Leu Arg Ala Val Phe Asp Leu Ser Ser Lys Thr Ala Gln Leu Lys
                    230
                                         235
Ala Leu Ser Thr Cys Gly Ser His Val Gly Val Met Ala Leu Tyr Tyr
                245
                                     250
Leu Pro Gly Met Ala Ser Ile Tyr Ala Ala Trp Leu Gly Gln Asp Ile
            260
                                265
                                                     270
Val Pro Leu His Thr Gln Val Leu Leu Ala Asp Leu Tyr Val Ile Ile
                             280
                                                 285
Pro Ala Thr Leu Asn Pro Ile Ile Tyr Gly Met Arg Thr Lys Gln Leu
                        295
                                            300
Leu Glu Gly Ile Trp Ser Tyr Leu Met His Phe Leu Phe Asp His
                    310
<210> 2174
<211> 311
<212> PRT
<213> Homo sapien (7637231-2-1-2470)
<220>
<221> VARIANT
<222> (1)...(311)
<223> Xaa = Any Amino Acid
<400> 2174
Met Leu Thr Phe His Asn Val Cys Ser Val Pro Ser Ser Phe Trp Leu
                                    10
Thr Gly Ile Pro Gly Leu Glu Ser Leu His Val Trp Leu Ser Ile Pro
            20
                                25
Phe Gly Ser Met Tyr Leu Val Ala Val Val Gly Asn Val Thr Ile Leu
                            40
Ala Val Val Lys Ile Glu Arg Ser Leu His Gln Pro Met Tyr Phe Phe
                        55
Leu Cys Met Leu Ala Ala Ile Asp Leu Val Leu Ser Thr Ser Thr Ile
                    70
                                        75
Pro Lys Leu Gly Ile Phe Trp Phe Gly Ala Cys Asp Ile Gly Leu
```

```
90
Asp Ala Cys Leu Gly Gln Met Phe Leu Ile His Cys Phe Ala Thr Val
            100
                               105
Glu Ser Gly Ile Phe Leu Ala Met Ala Phe Asp Arg Tyr Val Ala Ile
                           120
                                                125
Cys Asn Pro Leu Arg His Ser Met Val Leu Thr Tyr Thr Val Val Gly
                        135
                                            140
Arg Leu Gly Leu Val Ser Leu Leu Arg Gly Val Leu Tyr Ile Gly Pro
                    150
                                        155
Leu Pro Leu Met Ile Arg Leu Arg Leu Pro Leu Tyr Lys Thr His Val
                165
                                    170
Ile Ser His Ser Tyr Cys Glu His Met Ala Val Val Ala Leu Thr Cys
                                185
Gly Asp Ser Lys Val Asn Asn Val Tyr Gly Met Ser Ile Gly Phe Leu
                           200
Val Leu Ile Met Glu Ser Val Asp Ser Asp Ala Ser Xaa Val Arg Ser
                        215
                                            220
Ile Arg Ala Val Met Gly Leu Ala Asn His Glu Asp Arg Ile Lys Thr
                    230
                                        235
Met Gly Thr Gly Glu Tyr His Ile Cys Ala Ile Met Ile Phe Arg Ile
               245
                                    250
Pro Val Met Tyr Ile Pro Xaa Asp His Arg Asp Gly Gln Cys Val His
            260
                                265
                                                    270
His Pro Val His Asn Met Met Ala Arg Ile Tyr Ile Ile Ser His Pro
                           280
                                                285
Ser Ile Lys Pro Ser Val Xaa Asp Asp Arg Thr Lys Gln Ser Arg Glu
                        295
Ser Tyr Ile Gln Arg Ala Arg
<210> 2175
<211> 117
<212> PRT
<213> Homo sapien (7637231-7-1-1398)
<400> 2175
Asn Ile Lys Gly Ile Ala Val Pro Met Phe Ile Glu Val Leu Asp Leu
Phe Phe Ile Ile Leu Ser Tyr Ile Phe Ile Leu Gln Ala Val Leu Gln
                                25
Leu Ser Ser Gln Glu Ala Arg Tyr Lys Ala Phe Gly Thr Cys Val Ser
                            40
His Ile Gly Ala Ile Leu Ala Phe Tyr Thr Pro Ser Val Ile Ser Ser
                        55
                                            60
Val Met His Arg Val Ala Arg Cys Ala Ala Pro His Val His Ile Leu
                    70
                                        75
Leu Ala Asn Phe Tyr Leu Leu Phe Pro Pro Met Val Asn Pro Ile Ile
                85
                                    90
Tyr Gly Val Lys Thr Lys Gln Ile Arg Glu Ser Val Leu Gly Val Phe
            100
Pro Arg Lys Asp Val
       115
<210> 2176
<211> 227
<212> PRT
<213> Homo sapien (7637775-10-2645-3375)
<220>
<221> VARIANT
<222> (1) ... (227)
```

. ......

<223> Xaa = Any Amino Acid

<400> 2176 Gly Lys Glu Arg Glu Thr Arg Val Trp Arg Pro Arg Ala Gln Asp Arg 10 5 Gly Val Ser Thr Arg His Ala Ala Arg Val Thr Ser Tyr Gln Glu Cys 25 Gly Val Arg Gly Gly Gly Val Leu Cys Gly Ala Val Arg Pro Ser Pro 40 Leu Asp Ala Gln Leu His Asn Val Ile Ala Tyr Arg Arg Thr Cys Phe 55 Lys Asp Val Glu Ile Pro Asn Phe Val Trp Asp Pro Ser Gln Leu Pro 75 Arg Leu Ala Cys Cys Gly Thr Phe Thr Asn Asn Ile Ile Met Tyr Phe 85 90 Pro Ala Ala Ile Phe Gly Phe Leu Pro Ile Ser Gly Thr Leu Phe Ser 105 110 100 Tyr Asp Lys Ile Val Phe Ser Ile Leu Arg Val Ser Ser Ser Gly Gly 120 125 Lys His Lys Ala Phe Ser Thr Arg Gly Ser His Leu Ser Val Val Cys 135 140 Xaa Phe Tyr Gly Thr Gly Ile Gly Gly Tyr Leu Ser Ser Asp Val Ser 155 150 Ser Ser Pro Arg Lys Ala Ala Val Ala Ser Val Met Tyr Thr Val Ala 170 165 Ile Pro Met Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn Arg Asp Ile 185 190 Lys Ser Val Leu Arg Arg Pro His Gly Ser Thr Val Ser Ser Gln Tyr 205 200 Leu Leu Ile Cys Ser Ile Pro Phe Val Val Trp Val Lys Lys Gly Ser 210 215 Lys Val Lys

<210> 2177

<211> 316

<212> PRT

<213> Homo sapien (7655430-8-26100-29590)

<220>

<221> VARIANT

<222> (1)...(316)

<223> Xaa = Any Amino Acid

<400> 2177

Ile Ser Met Phe Ser Cys Asn Thr Ser Thr Ser Gly Gln Ser Thr Phe 5 10 Leu Leu Thr Gly Phe Pro Gly Leu Glu Ala Ser His His Trp Val Ser 25 20 Ile Pro Ile Asn Leu Phe Cys Val Val Ser Ile Leu Gly Asn Asn Ile 40 Ile Leu Phe Leu Ile His Thr Asp Pro Ala Leu His Glu Pro Met Tyr 60 55 Ile Phe Leu Ser Met Leu Ala Ala Ser Asp Leu Gly Leu Cys Ala Ser 75 70 Thr Phe Pro Thr Met Val Arg Leu Phe Trp Leu Gly Ala Arg Glu Leu 90 Pro Phe Asp Leu Cys Ala Ala Gln Met Phe Phe Ile His Thr Phe Thr 105 Tyr Val Glu Ser Gly Val Leu Leu Ala Met Ala Phe Asp Arg Phe Ile 125 120

```
Ala Ile Arg Asp Pro Leu His Tyr Ala Ile Ile Ile Thr Cys Ser Val
                        135
                                            140
Thr Ala Glu Val Gly Thr Ala Ile Leu Val Arg Ala Val Leu Leu Asn
                    150
                                        155
Leu Pro Gly Pro Ile Leu Leu Gln Gln Leu Leu Phe Pro Lys Ile Ser
                165
                                    170
                                                       175
Ala Leu Cys His Cys Tyr Cys Leu His Cys Asp Leu Val Gly Leu Ala
                                                   190
                               185
           180
Cys Ser Asp Thr Gln Ile Asn Ser Leu Val Gly Leu Val Ser Ile Leu
        195
                           200
Phe Ser Leu Cys Leu Asp Ser Phe Leu Ile Met Leu Ser Tyr Ala Leu
                                            220
                       215
Ile Leu Xaa Thr Val Leu Gly Ile Ala Ser Pro Gly Glu Arg Leu Lys
                   230
                                       235
Ala Leu Asn Thr Cys Val Ser His Leu Cys Ile Val Leu Ile Phe Tyr
                                                        255
                245
                                   250
Leu Pro Ile Ile Gly Leu Ser Val Leu His Arg Val Lys Lys His Asp
                               265
                                                    270
           260
Tyr Pro Ala Leu Ala Val Leu Met Ala Asn Leu His Phe Leu Val Pro
                                               285
                           280
        275
Pro Phe Met Asn Pro Ile Val Tyr Cys Ile Lys Ser Arg Gln Ile Arg
                       295
                                            300
Gln Ser Leu Leu Lys His Phe Gln Gln Lys Arg Ile
                   310
<210> 2178
<211> 154
<212> PRT
<213> Homo sapien (7657777-15-1-798)
<220>
<221> VARIANT
<222> (1)...(154)
<223> Xaa = Any Amino Acid
<400> 2178
Cys Thr Met Cys Val Trp Leu Leu Ala Xaa Asp Arg Gln Ile His Ile
                 5
                                    10
1
His Ser His Ser Asn Lys Pro Lys Gln Val Thr His Pro Met Cys Phe
                                25
Trp Asp Lys Asp Val His Ser Ser Trp Ala Trp Gly Cys Gly Tyr Arg
                                                45
                           40
        35
Lys Gly Asn Lys Phe Phe Leu Ser Tyr Asp Thr Leu Cys Pro Pro Lys
                       55
Val Ile His Pro Phe Arg Xaa Gln Leu Phe Leu Ser Ser Asp Ile
                                · 75 = · · - 80
                   70 ----
Ile Asn Asp Pro His Ile Asp Lys His Asp Ser Thr Leu Ile Thr Leu
                85
                                    90
Xaa Ala Phe Tyr Thr Ile Phe Tyr Lys Pro Thr Met Leu His Leu Phe
           100
                               105
Ser Glu Ile Leu Ser Met Ile Tyr Phe Met Gly Thr Lys Lys Asn Glu
                           120
                                               125
Xaa Lys Pro Arg Lys Lys Asp Cys Glu Ser His Xaa Lys Gly Leu Glu
                       135
                                            140
Xaa Met Gly Gln Ile Ile Ile Leu Phe Tyr
                    150
<210> 2179
<211> 170
<212> PRT
<213> Homo sapien (7657777-22-544-1713)
```

```
<220>
<221> VARIANT
<222> (1)...(170)
<223> Xaa = Any Amino Acid
<400> 2179
His Thr Gln Pro Arg Gly Leu Thr Arg Val Xaa Glu Phe Leu Leu
                                    10
1
Gly Leu Ser Gln Asp Pro Gln Leu Gln Pro Val Leu Ser Gly Leu Ser
Leu Cys Met Cys Leu Gly Thr Gln Leu Gly Asn Leu Leu Ile Ile Leu
                            40
Gly Val Ser Ser Asp Ser His Leu His Thr Pro Met Tyr Ser Phe Leu
                       55
                                           60
Ser Asn Leu Ser Gly Ala Asp Ile Ser Phe Thr Ser Thr Thr Gly Pro
                   70
                                       75
Lys Leu Ile Val Asp Ile His Ser Tyr Thr Arg Asp Ile Ser Tyr Ala
                                   90
                                                      95
               85
Arg Cys Leu Thr His Thr Pro Leu Phe Ala Ile Phe Gly Gly Val Glu
                              105
          100
                                                   110
Arg Asp Met Leu Leu Arg Val Met Gly Tyr Asp Arg Val Val Asp Ile
                           120
Cys Asp Pro Leu Tyr His Ser His Ala Met Asn Pro Cys Val Cys Gly
                       135
                                           140
Ser Leu Asp Leu Trp Ser Leu Phe Phe Leu Thr Leu Leu Tyr Thr His
                   150
                                       155
Leu His Asn Ser Ile Ala Leu His Met Thr
               165
<210> 2180
<211> 198
<212> PRT
<213> Homo sapien (7657777-42-1-597)
<220>
<221> VARIANT
<222> (1)...(198)
<223> Xaa = Any Amino Acid
<400> 2180
Met Asn Pro Cys Leu Cys Gly Phe Arg Val Val Ser Phe Phe Phe
                                   10
His Ser Leu Leu Gly Ala Gln Val His Asn Leu Ser Ala Ser Gln Met
                               25
Thr Cys Phe Glu Tyr Val Glu Ile His Asn Phe Leu Trp Ala Leu Ser
                           40
Gln Leu Pro His Arg Ala Trp Cys Asp Thr Phe Pro Asn Asn Ile Ile
                       55
Val Tyr Phe Pro Ala Ala Ile Phe Gly Phe Leu Pro Ile Ala Gly Thr
                   70
                                       75
Leu Phe Ser Xaa Tyr Glu Ser Val Ser Ser Ile Glu Arg Val Ser Ser
               85
                                   90
Xaa Gly Gly Glu Tyr Lys Ala Phe Pro Thr Cys Gly Ser His Leu Ser
                               105
           100
Val Val Cys Xaa Leu Tyr Gly Thr Gly Val Gly Gly His Leu Ser Ser
                                               125
       115
                           120
Asp Val Ser Ser Ser Pro Arg Lys Ser Ala Val Ala Ser Val Met Tyr
                                          140
                      135
Thr Val Val Thr Pro Met Leu Asn Pro Phe Ile Tyr Ser Met Arg Asn
                                      155
                   150
```

```
Arg Asp Thr Lys Ser Val Leu Arg Arg Pro His Gly Ser Thr Val Xaa
                165
                                    170
Phe Xaa Tyr Leu Leu Ile Cys Pro Ile Pro Phe Val Val Trp Val Lys
                                185
                                                     190
            180
Lys Gly Arg Lys Val Lys
        195
<210> 2181
<211> 199
<212> PRT
<213> Homo sapien (7657788-15-11714-13012)
<220>
<221> VARIANT
<222> (1)...(199)
<223> Xaa = Any Amino Acid
<400> 2181
Leu Glu Met Xaa Leu Lys Ile Leu Tyr Leu Lys Asn Cys Ser Phe Xaa
                                    10
Cys Asn Arg Pro Glu His Tyr Asn Xaa Lys Asn Cys Gly Xaa Phe Cys
Leu Leu Ile Thr Ile Ile Thr Phe Arg Ser Gly Ile Ile Asp Ile Cys
                            40
Leu His His Lys Thr Ile Phe Ile Phe Lys Lys His Ser Gly Phe
                        55
                                            60
Glu Gly Xaa Leu Trp Leu Arg Ile Xaa Asn Gln Ser Pro Lys Ser Trp
65
                    70
                                        75
Ile Ser Ile Ala Cys Asp Cys Cys Val Ala Xaa Asn Met Lys Gln Val
                85
                                    90
Ala Ile Ser Cys His Ser Phe Ser Ser Val Lys Xaa Ser Pro Tyr Val
            100
                                105
Ile Trp Lys Tyr Phe Cys Lys Xaa Tyr Lys His Ile Lys Asn Gly Arg
        115
                            120
                                                125
Asp Xaa Ile Xaa Leu Leu Thr Leu Lys Xaa Ile Lys His Leu Phe Val
                        135
                                            140
Val Cys Ile Ile Tyr Thr Pro Cys Met Phe His Pro Phe Gln Asn Lys
                    150
                                        155
Tyr Met Val Thr Glu Ser Leu Ile Xaa Ser Tyr Xaa Val Asp Pro Val
                                   170
                165
Ser Asn Pro Ala Leu Ile Thr Ala Arg Ser His Xaa Asn His Leu Val
            180
                                185
                                                     190
Ile Ser Gln His Asn Asn Asn
        195
<210> 2182
<211> 324
<212> PRT
<213> Homo sapien (7658481-16-11475-15098)
<220>
<221> VARIANT
<222> (1)...(324)
<223> Xaa = Any Amino Acid
<400> 2182
Met Ser Asp Ser Asn Leu Ser Asp Asn His Leu Pro Asp Thr Phe Phe
                 5
                                    10
Leu Thr Gly Ile Pro Gly Leu Glu Ala Ala His Phe Trp Ile Ala Ile
            20
                                25
```

Pro Phe Cys Ala Met Tyr Leu Val Ala Leu Val Gly Asn Ala Ala Leu

```
40
                                                45
Ile Leu Val Ile Ala Met Asp Asn Ala Leu His Ala Pro Met Tyr Leu
                       55
Phe Leu Cys Leu Leu Ser Leu Thr Asp Leu Ala Leu Ser Ser Thr Thr
                    70
Val Pro Lys Met Leu Ala Ile Leu Trp Leu His Ala Gly Glu Ile Ser
Phe Gly Gly Cys Leu Ala Gln Met Phe Cys Val His Ser Ile Tyr Ala
                                105
Leu Glu Ser Ser Ile Leu Leu Ala Met Ala Phe Asp Arg Tyr Val Ala
                            120
                                                125
Ile Cys Asn Pro Leu Arg Tyr Thr Thr Ile Leu Asn His Ala Val Ile
                        135
                                            140
Gly Arg Ile Gly Phe Val Gly Leu Phe Arg Ser Val Ala Ile Val Ser
                                        155
                   150
Pro Phe Ile Phe Leu Leu Arg Arg Leu Pro Tyr Cys Gly His Arg Val
               165
                                   170
Met Thr His Thr Tyr Cys Glu His Met Gly Ile Ala Arg Leu Ala Cys
                               185
Ala Asn Ile Thr Val Asn Ile Val Tyr Gly Leu Thr Val Ala Leu Leu
                           200
                                                205
Ala Met Gly Leu Asp Ser Ile Leu Ile Ala Ile Ser Tyr Gly Phe Ile
                       215
                                            220
Leu His Ala Val Phe His Leu Pro Ser His Asp Ala Gln His Lys Ala
                                        235
                   230
Leu Ser Thr Cys Gly Ser His Ile Gly Ile Ile Leu Val Phe Tyr Ile
               245
                                    250
Pro Ala Phe Phe Ser Phe Leu Thr His Arg Phe Gly His His Glu Val
           260
                                265
Pro Lys His Val His Ile Phe Leu Ala Asn Leu Tyr Val Leu Val Pro
       275
                            280
                                                285
Pro Val Leu Asn Pro Ile Leu Tyr Gly Ala Arg Thr Lys Glu Ile Arg
                       295
Ser Arg Leu Leu Lys Leu Leu His Leu Gly Lys Thr Ser Ile Xaa Met
                   310
Leu Ser Arg Ser
```

<210> 2183

<211> 317

<212> PRT

<213> Homo sapien (7658481-18-4217-6941)

<400> 2183

Met Ser Gln Val Thr Asn Thr Thr Gln Glu Gly Ile Tyr Phe Ile Leu 10 Thr Asp Ile Pro Gly Phe Glu Ala Ser His Ile Trp Ile Ser Ile Pro 25 Val Cys Cys Leu Tyr Thr Ile Ser Ile Met Gly Asn Thr Thr Ile Leu 40 Thr Val Ile Arg Thr Glu Pro Ser Val His Gln Arg Met Tyr Leu Phe 55 60 Leu Ser Met Leu Ala Leu Thr Asp Leu Gly Leu Thr Leu Thr Thr Leu 75 70 Pro Thr Val Met Gln Leu Leu Trp Phe Asn Val Arg Arg Ile Ser Ser 90 85 Glu Ala Cys Phe Ala Gln Phe Phe Leu His Gly Phe Ser Phe Met 105 110 Glu Ser Ser Val Leu Leu Ala Met Ser Val Asp Cys Tyr Val Ala Ile 120 Cys Cys Pro Leu His Tyr Ala Ser Ile Leu Thr Asn Glu Val Ile Gly

```
135
                                             140
 Arg Thr Gly Leu Ala Ile Ile Cys Cys Cys Val Leu Ala Val Leu Pro
                    150
                                        155
 Ser Leu Phe Leu Leu Lys Arg Leu Pro Phe Cys His Ser His Leu Leu
                165
                                     170
 Ser Arg Ser Tyr Cys Leu His Gln Asp Met Ile Arg Leu Val Cys Ala
             180
                                185
 Asp Ile Arg Leu Asn Ser Trp Tyr Gly Phe Ala Leu Ala Leu Leu Ile
                            200
 Ile Ile Val Asp Pro Leu Leu Ile Val Ile Ser Tyr Thr Leu Ile Leu
                        215
                                            220
 Lys Asn Ile Leu Gly Thr Ala Thr Trp Ala Glu Arg Leu Arg Ala Leu
                     230
                                        235
Asn Asn Cys Leu Ser His Ile Leu Ala Val Leu Val Leu Tyr Ile Pro
                245
                                    250
Met Val Gly Val Ser Met Thr His Arg Phe Ala Lys His Ala Ser Pro
            260
                                265
Leu Val His Val Ile Met Ala Asn Ile Tyr Leu Leu Ala Pro Pro Val
                            280
                                                285
Met Asn Pro Ile Ile Tyr Ser Val Lys Asn Lys Gln Ile Gln Trp Gly
                        295
                                            300
Met Leu Asn Phe Leu Ser Leu Lys Asn Met His Ser Arg
                    310
<210> 2184
<211> 315
<212> PRT
<213> Homo sapien (7658481-19-24037-28136)
<220>
<221> VARIANT
<222> (1)...(315)
<223> Xaa = Any Amino Acid
<400> 2184
Phe Ser Gln Asn Leu Leu Ile Ser Gly Ser Gly Ser Phe Val Leu Leu
Gly Met Pro Gly Leu Glu Ala Leu His Ala Trp Leu Ser Val Leu Val
            20
                                25
Cys Leu Leu Tyr Met Ala Ala Leu Val Gly Asn Ala Leu Leu Val Gly
                            40
Leu Val Val Thr Asp Lys Ala Leu Trp Ala Pro Met Tyr Gln Leu Leu
                        55
                                            60
Trp Leu Leu Ala Ala Ala Asp Phe Val Leu Ala Thr Ser Thr Val Pro
                                        75
Lys Ala Leu Ala Val Leu Trp Gly Leu Ser Ser Glu Ile Ser Phe Gly
                                    90
Gly Cys Leu Ala Gln Leu Phe Val Ala His Ser Val Asn His Cys His
                                105
Ile Ala Glu Ser Ser Val Leu Leu Ser Thr Ala Val Asp Cys Gln Pro
       115
                            120
Leu Arg Tyr Gly Ala Leu Leu Ala Gln Phe Val Val Gly Leu Val Ala
                        135
                                            140
Leu Thr Thr Met Thr Arg Asp Val Cys Val Met Tyr Thr Leu Xaa Phe
                    150
                                        155
Leu Phe Lys Lys Leu Pro Tyr Cys Gly Gln Trp Ala Leu Thr His Thr
                165
                                    170
Tyr Cys Glu His Met Gly Val Ala Cys Leu Ala Cys Gly Asp Thr Cys
                                185
Pro Ile Ile Arg Tyr Gly Leu Ala Thr Thr Leu Leu Ser Pro Ala Leu
                            200
```

```
Asp Leu Gly Leu Ile Gly Ala Ser Tyr Ala Leu Ile Phe Arg Ala Val
                       215
                                           220
Cys Arg Leu Pro Ser His Val Ala Cys His Lys Ala Leu Gly Asn Cys
                                       235
                   230
225
Gly Thr Tyr Ala Ser Ile Ile Gly Leu Phe Tyr Thr Pro Ala Leu Phe
                                   250
               245
Ser Phe Leu Ala His Cys Phe Gly Cys His Thr Val Pro Asn His Ile
                               265
           260
His Ile Leu Leu Ala Asn Leu Tyr Ala Val Val Phe Pro Ala Phe Asn
                                              285
       275
                           280
Pro Val Val Tyr Gly Val Gln Thr Gln Gln Ser Ser Glu Ala Gln Glu
                                           300
                       295
Leu Ala Ser Thr Phe Leu Gly Arg Ser Ser Glu
                   310
<210> 2185
<211> 320
<212> PRT
<213> Homo sapien (7658481-19-6742-9039)
Met Pro Ser Ala Ser Ala Met Ile Ile Phe Asn Leu Ser Ser Tyr Asn
                                   10
Pro Gly Pro Phe Ile Leu Val Gly Ile Pro Gly Leu Glu Gln Phe His
                               25
           20
Val Trp Ile Gly Ile Pro Phe Cys Ile Ile Tyr Ile Val Ala Val Val
                          40
                                               45
Gly Asn Cys Ile Leu Leu Tyr Leu Ile Val Val Glu His Ser Leu His
                                           60
                     55
Glu Pro Met Phe Phe Phe Leu Ser Met Leu Ala Met Thr Asp Leu Ile
                                       75
                   70
Leu Ser Thr Ala Gly Val Pro Lys Ala Leu Ser Ile Phe Trp Leu Gly
               85
                                   90
Ala Arg Glu Ile Thr Phe Pro Gly Cys Leu Thr Gln Met Phe Phe Leu
                               105
           100
His Tyr Asn Phe Val Leu Asp Ser Ala Ile Leu Met Ala Met Ala Phe
                          120
                                               125
Asp His Tyr Val Ala Ile Cys Ser Pro Leu Arg Tyr Thr Thr Ile Leu
                                           140
                       135
Thr Pro Lys Thr Ile Ile Lys Ser Ala Met Gly Ile Ser Phe Arg Ser
                   150
                                       155
Phe Cys Ile Ile Leu Pro Asp Val Phe Leu Leu Thr Cys Leu Pro Phe
                                   170
               165
Cys Arg Thr Arg Ile Ile Pro His Thr Tyr Cys Glu His Ile Gly Val
           180
                               185
Ala Gln Leu Ala Cys Ala Asp Ile Ser Ile Asn Phe Trp Tyr Gly Phe
                                               205
                          200
       195
Cys Val Pro Ile Met Thr Val Ile Ser Asp Val Ile Leu Ile Ala Val
                                           220
                      215
Ser Tyr Ala His Ile Leu Cys Ala Val Phe Gly Leu Pro Ser Gln Asp
                                       235
                   230
Ala Cys Gln Lys Ala Leu Gly Thr Cys Gly Ser His Val Cys Val Ile
                                   250
       245
Leu Met Phe Tyr Thr Pro Ala Phe Phe Ser Ile Leu Ala His Arg Phe
                               265
           260
Gly His Asn Val Ser Arg Thr Phe His Ile Met Phe Ala Asn Leu Tyr
                           280
                                               285
       275
Ile Val Ile Pro Pro Ala Leu Asn Pro Met Val Tyr Gly Val Lys Thr
                       295
                                           300
Lys Gln Ile Arg Asp Lys Val Ile Leu Leu Phe Ser Lys Gly Thr Gly
                   310
                                       315
305
```

```
<210> 2186
<211> 315
<212> PRT
<213> Homo sapien (7658481-2-1-1440)
<220>
<221> VARIANT
<222> (1)...(315)
<223> Xaa = Any Amino Acid
<400> 2186
Met Gly Gly Phe Gly Thr Asn Ile Ser Ser Thr Thr Ser Phe Thr Leu
Thr Gly Phe Pro Glu Met Lys Gly Leu Glu His Trp Leu Ala Ala Leu
                               25
Leu Leu Leu Cys Ala Ile Ser Phe Leu Gly Asn Ile Leu Ile Leu
                           40
                                                45
Phe Ile Ile Lys Glu Glu Gln Ser Leu His Gln Pro Met Tyr Tyr Phe
                       55
Leu Ser Leu Phe Ser Val Asn Asp Leu Gly Val Ser Phe Ser Thr Leu
                    70
Pro Thr Val Leu Ala Ala Val Cys Phe His Ala Pro Glu Thr Thr Phe
                                    90
Asp Ala Cys Leu Ala Gln Thr Phe Phe Ile His Phe Ser Ser Trp Thr
           100
                               105
                                                   110
Glu Phe Gly Ile Leu Leu Ala Met Ser Phe Asp His Tyr Val Ala Ile
                                               125
                           120
       115
Cys Asn Pro Leu Arg Tyr Ala Thr Val Leu Thr Asp Val Arg Val Ala
                      135
                                           140
His Asn Gly Ile Ser Ile Val Ile Arg Ser Phe Cys Met Val Phe Pro
                                       155
                   150
Leu Pro Phe Leu Leu Lys Arg Leu Pro Phe Cys Lys Ala Ser Val Val
               165
                                   170
Leu Ser His Ser Tyr Cys Leu His Ala Asp Leu Ile Arg Leu Pro Cys
                               185
                                                    190
           180
Gly Asp Thr Thr Ile Asn Ser Met Tyr Gly Leu Phe Ile Val Ile Ser
                           200
                                                205
Ala Phe Gly Val Asp Ser Leu Leu Ile Leu Leu Ser Tyr Val Leu Ile
                        215
                                            220
Leu His Ser Val Leu Ala Ile Ala Ser Arg Gly Glu Arg Leu Lys Thr
                                        235
                    230
Leu Asn Thr Cys Val Ser His Ile Tyr Ala Val Leu Ile Phe Tyr Val
               245
                                   250
Pro Met Val Ser Val Ser Met Val His Arg Phe Gly Arg His Ala Pro
                         265
Glu Tyr Val His Lys Phe Met Ser Ser Leu Tyr Leu Pro Met Leu Tyr
                           280
                                               285
Pro Ile Ile Tyr Ser Ile Lys Thr Lys Glu Ile Arg Arg Leu His
                       295
Lys Met Leu Leu Gly Ala Lys Phe Xaa Ser Lys
                    310
<210> 2187
<211> 124
<212> PRT
<213> Homo sapien (7658497-19-2333-3610)
<220>
<221> VARIANT
<222> (1)...(124)
```

1296

<223> Xaa = Any Amino Acid

<400> 2187 Leu Ile Leu Ser Ala Gln Ile Cys Arg Ala Leu Xaa Leu Ser Ile Phe Leu Val Arg Leu His Phe Lys Lys Leu Gly Pro Lys Ser Leu Asp Leu 25 Tyr Phe Pro Gly Leu Gly Leu Lys Tyr Lys Ile Asn Ser Thr Asn Asn 40 Tyr Arg Thr Ala Leu Glu Phe Xaa Val Phe Arg Gln Ala Val Xaa Leu 55 60 Xaa Phe Thr Phe Phe Leu Phe Lys Tyr Ser Cys Leu Ser Lys Pro Gln 75 Xaa Glu Xaa Gly Ser Ser Asp Xaa Val Pro Cys Gln Tyr Ser Arg Cys Ser Glu His Asn Val Ala Leu Leu Ser Pro Gly Phe Ile Val Met Xaa 105 Val Leu Val Gln Leu Pro Leu Phe Ser Phe Thr Ser 120

<210> 2188

<211> 278

<212> PRT

<213> Homo sapien (7670214-14-2036-3224)

<400> 2188

Met Leu Leu Gly Asn Leu Ala Ile Ile Ser Phe Ile Cys Leu Asp Ser 10 Arg Leu His Ser Pro Met Tyr Phe Phe Leu Cys Asn Phe Ser Leu Met 20 25 Glu Met Val Val Thr Ser Thr Val Val His Arg Met Leu Ala Asp Leu Leu Ser Thr His Lys Thr Met Ser Leu Ala Lys Cys Leu Thr Gln Ser 55 Phe Phe Tyr Phe Ser Leu Gly Ser Ala Asn Phe Leu Ile Leu Met Val 75 Met Ala Phe Asp Arg Tyr Val Ala Ile Cys His Pro Leu Arg Tyr Pro 85 90 Thr Ile Thr Asn Gly Pro Val Cys Val Lys Leu Val Val Ala Cys Trp 100 105 Val Val Gly Phe Leu Ser Ile Val Ser Pro Thr Leu Gln Lys Thr Arg 120 Leu Trp Phe Cys Gly Pro Asn Ile Ile Gly His Tyr Phe Cys Asp Ser 135 140 Ala Pro Leu Leu Lys Leu Ala Cys Ser Asp Thr Arg His Ile Glu Arg 150 155 Met Asp Leu Phe Leu Ser Leu Leu Phe Val Leu Thr Thr Met Leu Leu 165 170 Ile Ile Leu Ser Tyr Ile Leu Ile Val Ala Ala Val Leu His Ile Pro 185 Ser Ser Ser Gly Cys Gln Lys Ala Phe Ser Thr Cys Ala Ser His Leu 200 Thr Val Val Leu Gly Tyr Gly Ser Ala Ile Phe Ile Tyr Val Arg 215 220 Pro Gly Lys Gly His Ser Thr Tyr Leu Asn Lys Ala Val Ala Met Val 230 235 Thr Ala Met Val Thr Pro Phe Leu Asn Pro Phe Ile Phe Thr Phe Arg 245 250 Asn Glu Lys Val Lys Glu Val Ile Glu Asp Val Thr Lys Arg Ile Phe 260 265 Leu Gly Asp Pro Ala Ala

275

```
<210> 2189
<211> 203
<212> PRT
<213> Homo sapien (7670214-23-12266-12905)
<220>
<221> VARIANT
<222> (1)...(203)
<223> Xaa = Any Amino Acid
<400> 2189
Pro Leu Ile Xaa Pro Asp Pro Phe Ile Phe Thr Gln Leu Cys Ser Phe
                                   10
Leu Asn Lys Tyr Val Ala Ser Thr Arg Leu Asn Asp His Asn Ile Asp
                               25
          20
Gln Ala Pro Xaa Ser Arg Ser Ile Ile Leu Asn Leu Cys Leu Ile Ser
                            40
Phe Gly Ile Lys Gly Met Trp Ser Asn Val Asn Ser Cys Phe Leu Ser
                       55
Ser Leu Pro Arg Glu Lys Glu Leu Gly Leu Lys Ser Glu Gly Asn Tyr
                   70
                                       75
Ser Ser Ala Thr Gln Phe Cys Leu Leu Gly Phe Pro Gly Phe Glu Glu
                                   90
Leu Pro His Phe Leu Leu Val Asn Phe Phe Phe His Leu Met Arg Leu
            100
                               105
Met Gly Asn Ala Val Ile Tyr Met Val Arg Ile Asp Xaa Ser Leu Gln
                                                125
                            120
Ser Pro Gly Asp Phe Phe Leu Ser Gln Leu Phe Ile Phe Ser His Ser
                       135
                                            140
Leu Leu Met Asp Ile Ser Ile Val Ile Ala Ser Leu Ile Gln Ile Asp
                                       155
                   150
Ser Tyr Ser Ser Ile Pro Ser Ala Ser Gly Gln Lys Lys Ser Phe Ser
                                            . 175
               165
                                   170
Thr His Ala Ser His Phe Thr Cys Val Gly Ile Asp Tyr Asp Ser Cys
                                                   190
                               185
           180
Leu Phe Leu Tyr Val Lys Pro Lys Gln Ile Trp
                            200
<210> 2190
<211> 321
<212> PRT
<213> Homo sapien (7671636-1-417-2747)
<220> -
<221> VARIANT
<222> (1)...(321)
<223> Xaa = Any Amino Acid
<400> 2190
Phe Lys Arg Ser Ile Thr Phe Thr Pro Thr Thr Phe Thr Leu Val Gly
                                   10
Ile Pro Gly Leu Glu Ala Glu His Tyr Trp Ile Ser Ile Pro Phe Cys
                                25
Leu Ile Tyr Thr Ile Ile Phe Pro Gly Asn Gly Ile Ile Leu His Ile
                           40
Ile Arg Ile Asp Ser Ser Leu His Gln Pro Met Tyr Tyr Phe Leu Ala
                                           60
Met Pro Ala Phe Val Glu Leu Gly Val Ser Ala Ser Thr Met Pro Thr
                                       75
```

```
Val Leu Ser Ile Phe Leu Phe Gly Ile Asn Asp Val Ser Phe Gly Gly
               85
                                  90
Cys Leu Leu Gln Met Phe Ser Met His Ser Phe Thr Leu Met Glu Ser
                              105
Gly Val Leu Leu Ala Met Ser Val Asp Arg Phe Val Ala Ile Tyr Ser
                          120
Pro Leu Arg Tyr Thr Thr Ile Leu Thr Ile Ala Cys Ile Ser Gly Met
                      135
Gly Ala Ala Ile Ala Leu Arg Ser Val Met Leu Met Leu Pro Leu Leu
                  150
                                      155
Phe Leu Leu Arg Arg Leu Pro Phe Cys Gly His Asn Thr Leu Thr His
               165
                                 170
Ser Tyr Cys Leu His Ser Asp Leu Ile Lys Leu Pro Cys Gly Asp Thr
                           185
Arg Pro Asn Ser Ile Leu Ala Leu Phe Val Ile Thr Phe Thr Phe Gly
                           200
Leu Asp Leu Leu Phe Ile Val Val Ser Tyr Val Leu Ile Leu His Thr
                       215
Val Leu Glu Ile Ala Ser Arg Ser Arg Ala Trp Gln Ala Leu Asn Thr
                   230
                                       235
Cys Val Ser His Ile Cys Ala Val Leu Val Tyr Tyr Val Pro Met Ile
               245
                                   250
Ser Leu Ser Xaa Val His Arg Phe Gly Arg His Leu Pro Pro Leu Phe
                                                  270
                               265
Gln Thr Val Thr Ala Asn Ala Tyr Leu Phe Phe Pro Pro Val Val Asn
                          280
Pro Ile Val Tyr Ser Ile Lys Ile Lys Glu Ile Arg Asn Ser Val Val
                      295
Leu Thr Leu Ser Arg Lys Arg Gly Glu Phe Xaa Trp Arg Pro Lys Ile
305
                   310
```

```
<210> 2191
```

## <400> 2191

Ile Gln Cys Lys Gly Xaa Xaa Lys Xaa Ile Lys Thr Phe Ser Val Thr 10 Pro Ile Leu Asn Gly Asn Arg Glu Ile Ala Arg Phe Leu Ser Asn Leu 25 Ser Leu Ala Gly Ile Gly Phe Pro Ser Thr Ile Val Ser Lys Met Ile 40 Val Asp Ile Gln Ser His Ser Arg Val Ile Ser Tyr Ala Gly Cys Leu 55 60 Thr Gln Val Ser Leu Phe Ala Val Phe Gly Cys Met Glu Asp Met Leu 70 75 Leu Ser Val Met Ala Tyr Asp Arg Phe Val Asp Ile Cys His Pro Leu 90 Asp Tyr Pro Val Ile Met Asn Pro Cys Phe Cys Gly Phe Leu Val Leu 105 Leu Ser Phe Phe Leu Ser Leu Leu Asp Ser Gln Leu His Asn Trp Ile 120 Ala Leu Gln Ile Thr Cys Phe Lys Asp Val Glu Ile Pro Asn Phe Phe

<sup>&</sup>lt;211> 295

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Homo sapien (7690091-1-489-1697)

<sup>&</sup>lt;220>

<sup>&</sup>lt;221> VARIANT

<sup>&</sup>lt;222> (1)...(295)

<sup>&</sup>lt;223> Xaa = Any Amino Acid

```
135
                                            140
Cys Asp Pro Ser Gln Leu Pro His Leu Ala Cys Cys Asp Thr Phe Thr
                   150
                                       155
Asn Asp Ile Val Met Tyr Phe Leu Ala Ala Ile Phe Gly Phe Leu Pro
                165
                                    170
Ile Ser Gly Thr Phe Phe Ser Tyr Tyr Lys Ile Val Ser Ser Ile Leu
                               185
            180
                                                    190
Arg Val Ser Ser Ser Gly Gly Lys Tyr Lys Ala Phe Ser Thr Cys Gly
                           200
Ser His Leu Ser Val Val Cys Leu Phe Tyr Gly Thr Gly Phe Gly Gly
                       215
                                            220
Asp Leu Ser Ser Asp Met Ser Ser Tyr Pro Arg Lys Gly Ala Val Ala
                   230
                                        235
Ser Val Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe Ile Tyr
                245
                                   250
Ser Arg Asn Arg Glu Ile Lys Ser Ala Leu Arg Gln Leu His Cys Arg
           260
                               265
Ile Val Xaa Ser His Phe Leu Ile Ile Cys Ser Ile Pro Ser Val Val
                           280
Xaa Val Arg Lys Gly Ser Lys
<210> 2192
<211> 197
<212> PRT
<213> Homo sapien (7705148-11-94-972)
<220>
<221> VARIANT
<222> (1)...(197)
<223> Xaa = Any Amino Acid
<400> 2192
Ala Ala Met Ala Xaa Asp Arg Tyr Ile Ala Ile Cys Asn Pro Leu Leu
Tyr Thr Val Ile Met Ser Lys Lys Val Cys Cys Gln Leu Ala Ile Gly
                                25
Ala Phe Leu Gly Gly Thr Met Ser Ser Ile Ile His Thr Thr Asn Thr
                            40
Phe His Leu Ser Phe Cys Ser Arg Asp Ile Asn His Phe Phe Cys Asp
                       55
                                            60
Ile Ser Pro Leu Phe Ser Leu Ser Cys Thr Asp Thr Tyr Met His Asp
                    70
                                        75
Ile Ile Leu Val Val Phe Ala Ser Phe Val Glu Ala Ile Cys Leu Leu
                                    90
Ser Val Leu Leu Ser. Tyr Val Phe Ile Met Ala Ala Ile Leu Arg Thr
                                105
            100
Gly Ser Val Glu Gly Arg Arg Gly Phe Ser Thr Cys Ala Ser His
                           120
                                                125
Leu Thr Val Val Thr Met Tyr His Gly Thr Leu Ile Phe Ile Tyr Leu
                        135
Arg Pro Ser Thr Gly His Ser Leu Asp Ile Asp Lys Val Thr Ser Val
                    150
                                        155
Phe Tyr Thr Leu Ile Ile Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu
               165
                                   170
Arg Asn Lys Asp Val Lys Asn Ala Phe Arg Lys Val Ile Gly Arg Lys
           180
                               185
Leu Leu Pro Xaa Gly
       195
```

<210> 2193

```
<211> 128
 <212> PRT
 <213> Homo sapien (7705148-13-12855-13510)
 <220>
 <221> VARIANT
 <222> (1)...(128)
 <223> Xaa = Any Amino Acid
 <400> 2193
 Ser Arg Ser Asp Thr Gln Val Asn Glu Leu Val Leu Phe Thr Val Phe
                                    10
 Gly Phe Ile Glu Leu Ser Thr Ile Ser Gly Val Phe Ile Ser Tyr Cys
                                 25
 Tyr Ile Ile Leu Ser Val Leu Glu Ile His Ser Ala Glu Gly Arg Phe
                            40
 Lys Ala Leu Ser Thr Cys Thr Ser His Leu Ser Ala Val Ala Ile Phe
                        55
 Gln Gly Thr Leu Leu Phe Met Tyr Phe Arg Pro Ser Ser Ser Tyr Ser
                     70
                                         75
 Leu Asp Gln Asp Lys Met Thr Ser Leu Phe Tyr Thr Leu Val Val Pro
                 85
                                     90
Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu
                                 105
Ala Leu Lys Lys Leu Lys Asn Lys Ile Leu Phe Xaa Gly Asn Ser Lys
                            120
<210> 2194
<211> 208
<212> PRT
<213> Homo sapien (7705148-18-30183-31440)
<220>
<221> VARIANT
<222> (1)...(208)
<223> Xaa = Any Amino Acid
<400> 2194
Met Glu Leu Glu Asn Gly Thr Val Lys Thr Gly Phe Phe Leu Leu Gly
                                    10
Phe Ser Asp His Leu Glu Leu Gln Ser Leu Leu Phe Ala Glu Phe Phe
           20
                                25
Ser Ile Tyr Ser Val Thr Leu Met Gly Asn Leu Gly Met Ile Leu Leu
                            40
                                                 45
Ile Thr Ile Ser Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Cys
                        55
                                            60
Val Leu Ser Phe Ile Asp Ala Cys Tyr Ser Ser Val Ile Ala Pro Lys
                    70
                                        75
Leu Leu Val Asn Leu Val Ser Glu Lys Lys Thr Ile Ser Tyr Asn Gly
                85
                                    90
Cys Val Ala Gln Leu Tyr Phe Phe Cys Ser Leu Val Asp Thr Glu Ser
                                105
                                                    110
Phe Leu Leu Ala Ala Met Ala Xaa Asp Arg Tyr Ile Ala Ile Cys Asn
                            120
                                                125
Pro Leu Leu Tyr Thr Val Ile Met Ser Lys Lys Val Cys Cys Gln Leu
                        135
                                            140
Ala Ile Gly Ala Phe Leu Gly Gly Thr Met Ser Ser Ile Ile His Thr
                    150
                                        155
Thr Asn Thr Phe His Leu Ser Phe Cys Ser Arg Asp Ile Asn His Phe
                                    170
Phe Cys Asp Ile Ser Pro Leu Phe Ser Leu Ser Cys Thr Asp Thr Tyr
```

```
185
Met His Asp Ile Ile Leu Val Val Phe Ala Ser Phe Val Glu Ala Ile
        195
                            200
<210> 2195
<211> 188
<212> PRT
<213> Homo sapien (7705148-8-1-2633)
<400> 2195
Met Asp Trp Glu Asn Cys Ser Ser Leu Thr Asp Phe Phe Leu Leu Gly
                                    10
Ile Thr Asn Asn Pro Glu Met Lys Val Thr Leu Phe Ala Val Phe Leu
                                25
Ala Val Tyr Ile Ile Asn Phe Ser Ala Asn Leu Gly Met Ile Val Leu
                            40
                                                45
Ile Arg Met Asp Tyr Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                        55
                                           60
His Leu Ser Phe Cys Asp Leu Cys Tyr Ser Thr Ala Thr Gly Pro Lys
                                        75
                    70
Met Leu Val Asp Leu Leu Ala Lys Asn Lys Ser lle Pro Phe Tyr Gly
               85
Cys Ala Leu Gln Phe Leu Val Phe Cys Ile Phe Ala Asp Ser Glu Cys
                                105
                                                    110
Leu Leu Ser Val Met Ala Phe Asp Arg Tyr Lys Ala Ile Ile Asn
       115
                            120
                                                125
Pro Leu Leu Tyr Thr Val Asn Met Ser Ser Arg Val Cys Tyr Leu Leu
                       135
                                           140
Leu Thr Gly Val Tyr Leu Val Gly Ile Ala Asp Ala Leu Ile His Met
                                       155
                   150
Thr Leu Ala Phe Arg Leu Cys Phe Cys Gly Ser Asn Glu Ile Asn His
               165
                                   170
Phe Phe Cys Asp Ile Pro Pro Leu Leu Leu Ser
<210> 2196
<211> 210
<212> PRT
<213> Homo sapien (7705159-18-2705-3893)
<220>
<221> VARIANT
<222> (1)...(210)
<223> Xaa = Any Amino Acid
<400> 2196
Cys His Pro Pro Leu Arg Trp Gly Ser Xaa Glu Pro Ala Glu Glu Glu
1
                5
                                    10
Gly Leu Ala Leu Ser Ser Arg Xaa Phe Phe Phe Leu Ser Val Leu
           20
                                25
Asp Ala Gln Leu His Asn Leu Ile Ala Leu Gln Met Thr Cys Phe Gln
                            40
                                                45
Asp Ala Glu Ile Pro Asn Phe Phe Trp Asp Pro Ser Gln Leu Pro His
                        55
                                            60
Leu Ala Cys Cys Asp Thr Phe Thr Asn Asn Ile Ile Met Tyr Phe Pro
                   70
                                        75
Ala Val Ile Phe Gly Phe Leu Pro Ile Ser Gly Thr Leu Phe Ser Tyr
                                    90
Tyr Lys Ile Val Ser Ser Ile Leu Ser Val Ser Ser Ser Arg Gly Gln
           100
                               105
Tyr Lys Ala Phe Ser Thr Cys Gly Ser His Leu Ser Val Val Cys Xaa
```

```
115
                            120
                                                125
Phe Tyr Gly Thr Gly Val Gly Gly Tyr Phe Ser Ser Asp Val Ser Ser
                       135
                                           140
Ser Pro Arg Lys Ala Ala Val Ala Ser Val Met Tyr Thr Val Ile Thr
                   150
                                       155
Pro Met Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn Arg His Ile Lys
               165
                                    170
Ser Val Leu Arg Arg Pro His Ser Ser Thr Val Gln Ser Pro Cys Leu
                                185
                                                    190
Leu Asn Cys Ser Ile Pro Phe Val Val Trp Val Asn Lys Gly Ser Lys
                         200
       195
Val Lys
   210
<210> 2197
<211> 186
<212> PRT
<213> Homo sapien (7708872-11-1-1518)
<220>
<221> VARIANT
<222> (1)...(186)
<223> Xaa = Any Amino Acid
<400> 2197
Pro Ala His Pro Arg Ser Pro His His Pro Leu Phe Pro Pro Tyr Ile
                                    10
Tyr Leu Lys Asn Phe Phe Pro Thr Ile Phe Pro Gln Asn Leu Leu Ser
           20
                                25
Leu Leu Phe Thr Thr Val Phe Pro Pro Pro Pro Thr Pro Asn Ile Phe
                            40
Ser Pro Pro Ser Phe Pro His Cys Leu Phe Cys Asn Thr Phe Ser Cys
                        55
                                            60
Ser Leu Ile Leu Tyr Phe Pro Leu Ala Leu Thr Thr Leu Phe Thr Pro
                   70
                                        75
Pro Ser Thr Pro Lys Leu Phe Ser Pro Ser Tyr Arg Ser Ser His Thr
               85
                                   90
Ala Val Ser Val Ala Ala Thr Asn Arg Ser Glu Ala Ser Cys Ala Cys
                               105
           100
                                                    110
Arg Ser His Ser Leu Gln His Ala Ala Val Ala Ser Pro Cys Pro Gly
       115
                           120
                                                125
Pro Leu Ser Arg Glu Arg Ser Ser Pro Ala Arg Arg His Ala Xaa Ala
                       135
                                            140
Xaa Asn Gly Leu Thr Pro Leu Leu Ala Pro Phe Ile Tyr Xaa Gly Tyr
                                       155
                   150
Ala Tyr Glu Val Pro Gly Leu Leu Phe Gln Asp Trp Val Arg Glu Asn
               165
                                   170
Ala Glu Ala Tyr Ser Asp Trp Thr Leu Leu
<210> 2198
<211> 323
<212> PRT
<213> Homo sapien (7708872-16-23686-24654)
<220>
<221> VARIANT
<222> (1)...(323)
<223> Xaa = Any Amino Acid
```

<400> 2198

```
Val Ala Cys Tyr Leu Pro Glu Leu Ser Val Gly Cys Pro Gly Gly Lys
                                    10
Glu Asn Glu Thr Gly Val Gly Glu Phe Leu Leu Ser Ile Thr Ser
Asp Ser Glu Lys Gln Gln Ala Leu Phe Trp Leu Phe Leu Cys Met His
                            40
Leu Val Thr Glu Ala Gly Asn Thr Pro Ile Ile Leu Gly Ile Gly Ser
Asn Pro Arg Leu His Thr Pro Thr Tyr Phe Phe Thr His Leu Ser Phe
                                        75
Val Asn Ile Cys Phe Ile Thr Asn Leu Ile Pro Lys Leu Leu Val Asn
                                    90
His Val Ala Gly Thr Gly Met Ile Thr Ile Ser Ser Pro Gln Cys Leu
                                105
Thr Gln Met Tyr Phe Leu Ile Ser Phe Ala Asn Val Asp Thr Phe Leu
        115
                            120
                                                125
Leu Ala Ile Met Ala Leu Asp His Tyr Val Ala Ile Cys Ser Ala Leu
                       135
                                            140
Arg Tyr Cys Ser Ile Ile Thr Pro Glu Leu Cys Gln Gly Leu Ala Val
                   150
                                       155
Leu Ala Xaa Ala Gly Ser Ser Leu Ile Ser Leu Val His Thr Val Ile
                165
                                    170
Met Ser Arg Leu Ala Phe Cys Ser Ser Ala Gln Ile Ser His Phe Tyr
            180
                                185
Cys Asp Ala Tyr Leu Leu Met Lys Ile Ala Cys Ser His Thr Val Asn
                            200
Gln His Val Phe Leu Gly Ala Val Leu Phe Leu Ala Pro Cys Ala
                        215
                                            220
Leu Ile Leu Val Ser Tyr Ile Arg Ile Ala Ala Ala Ile Leu Arg Ile
                    230
Pro Ser Pro Thr Arg Arg Arg Lys Ala Cys Ser Ile Cys Ser Ser His
                245
                                    250
Leu Ser Leu Val Thr Leu Phe Tyr Gly Thr Val Leu Gly Ile Cys Ile
                                265
                                                    270
Xaa Pro Pro Asp Ser Phe Ser Ala Gln Asp Thr Ile Ala Thr Ile Met
                            280
                                                285
Tyr Thr Val Val Thr Ser Met Leu Asn Pro Phe Ile Tyr Ser Leu Met
                       295
Asn Lys Glu Val Gln Glu Ala Val Arg Arg Leu Phe Ser Arg Gly Ser
305
                    310
                                        315
His Ser Ser
<210> 2199
<212> PRT
<213> Homo sapien (7715624-11-1-3301)
```

## <400> 2199

Leu Ser Ile Cys Phe Phe Leu Cys Ile Phe Ser Ala Asp Ile Xaa Ser 10 Met Leu Ala Met Glu Gln Asn Asn Gly Thr Glu Val Thr Glu Phe Ile 25 Leu Leu Gly Phe Ala Gly Gln His Lys Ser Trp His Ile Leu Ser Ile 40 Ala Phe Leu Ala Ile Tyr Val Val Thr Pro Val Gly Asn Ile Gly Met

<sup>&</sup>lt;211> 328

<sup>&</sup>lt;220>

<sup>&</sup>lt;221> VARIANT

<sup>&</sup>lt;222> (1)...(328)

<sup>&</sup>lt;223> Xaa = Any Amino Acid

60

55

```
Ile Leu Leu Ile Lys Ile Asp Ala Ser Leu His Ile Pro Met Xaa Ile
                    70
Phe Leu Gln His Leu Ala Phe Val Asp Leu Cys Tyr Thr Ser Ala Ile
                                    90
 Thr Pro Lys Met Leu Lys Asn Phe Val Glu Thr Lys Lys Ser Ile Ser
                                105
 Cys Ile Gly Cys Met Val Gln Leu Leu Val Tyr Gly Thr Phe Ala Thr
                            120
                                                125
 Ser Asp Cys Tyr Ile Leu Ala Ala Met Ala Val Asp Arg Tyr Val Ala
                        135
                                            140
 Phe Cys Asn Pro Leu His Tyr Pro Gly Val Met Ser Gln Arg Leu Cys
                    150
                                        155
 Ile Lys Leu Leu Val Ser Ser Tyr Val Met Gly Phe Leu Asn Ala Ser
                165
                                   170
 Ile Asn Ile Ser Phe Thr Phe Ser Leu Asn Phe Cys Lys Ser Lys Thr
                               185
 Ile Asn His Phe Phe Cys Asp Glu Pro Pro Ile Ile Ala Leu Pro Cys
                            200
                                                205
 Ser Asn Ile Asp Leu Asn Ile Met Leu Leu Thr Val Phe Val Gly Leu
                       215
                                            220
Asn Leu Met Cys Thr Val Met Val Val Ile Ile Ser Cys Ile Tyr Val
                    230
                                        235
Leu Val Ala Ile Leu Arg Ile Ser Ser Ala Ala Gly Lys Lys Ser
                                    250
Leu Ser Thr Cys Ala Ser His Leu Thr Ala Val Thr Ile Phe Tyr Gly
            260
                                265
Val Leu Ser Tyr Met Tyr Leu Cys His Arg Ile Asn Glu Ser Gln Lys
                            280
Gln Glu Lys Val Ala Ser Val Phe Tyr Gly Ile Ile Pro Met Leu
                        295
                                            300
Asn Pro Leu Ile Tyr Ser Gln Arg Asn Gln Asp Val Ile Glu Ala Ile
                    310
                                        315
Lys Leu Thr Glu Lys Lys Tyr Phe
                325
<210> 2200
<211> 193
<212> PRT
<213> Homo sapien (7768677-1-106933-108798)
<220>
<221> VARIANT
<222> (1)...(193)
<223> Xaa = Any Amino Acid
<400> 2200
Phe Phe Asn Ile Thr Xaa Phe Val Pro Glu Val Met Lys Ser Leu Ser
                5
                                   10
Arg Ser Lys Asp Ile Ser Phe Asn Phe Cys Phe Xaa Phe Phe Phe Phe
                                25
Ser Cys Gly Cys Thr Gly Leu Thr Glu Asp Ile Phe Val Val Phe Lys
                            40
Ser Phe Val Leu Phe Gly Val Leu Ser Xaa Ala His Leu Pro Val Lys
                        55
Lys Lys Lys Arg Phe Cys Ser Leu Leu Tyr Xaa Thr Thr Ile Leu
```

90

Ile Cys Lys Trp Pro Lys Thr Ser Pro Phe Phe Thr Glu Phe Leu Ser

Leu Ser Arg Lys Asn Leu Lys Phe Gln Lys Asn Ile Glu Cys Glu Tyr

105

75

110

70

100

```
Met Ile Ser Val Xaa Ala Thr Cys Ile Gly Asn Lys Tyr Leu Asn Cys
                         120
Glu Ile Tyr Leu Arg Ser Leu Thr Phe Pro Asn Ile Ser Ser Ile Val
                       135
Phe Phe Leu Leu Gln Ser Lys Tyr Met Phe Thr Phe Xaa Lys Tyr Arg
                   150
                                        155
Glu Ala Gln Asn Trp Gly Lys Lys Pro Xaa Xaa Ile Pro Pro Ser Arg
               165
                                   170
Lys Lys Ala Ile Asn Leu Xaa Arg Ile Ser Ser Xaa Ser Leu Phe Cys
                                185
Val
<210> 2201
<211> 291
<212> PRT
<213> Homo sapien (7770649-26-5915-7266)
Met Val Gly Ala Asn His Ser Val Val Ser Glu Phe Val Phe Leu Gly
                                    10
Leu Thr Asn Ser Trp Glu Ile Arg Leu Leu Leu Val Phe Ser Ser
            20
                                25
Met Phe Tyr Met Ala Ser Met Met Gly Asn Ser Leu Ile Leu Leu Thr
        35
                            40
                                                45
Val Thr Ser Asp Pro His Leu His Ser Pro Met Tyr Phe Leu Leu Ala
                       55
                                            60
Asn Leu Ser Phe Ile Asp Leu Gly Val Ser Ser Val Thr Ser Pro Lys
                    70
                                        75
Met Ile Tyr Asp Leu Phe Arg Lys His Glu Val Ile Ser Phe Gly Gly
                                    90
Cys Ile Ala Gln Ile Phe Phe Ile His Val Ile Gly Gly Val Glu Met
            100
                                105
Val Leu Leu Ile Ala Met Ala Phe Asp Arg Tyr Val Ala Ile Cys Lys
                            120
                                               125
Pro Leu Gln Tyr Leu Thr Ile Met Ser Pro Arg Met Cys Met Phe Phe
                       135
                                           140
Leu Val Ala Ala Trp Val Thr Gly Leu Ile His Ser Val Val Gln Leu
                   150
                                        155
Val Phe Val Val Asn Leu Pro Phe Cys Gly Pro Asn Val Ser Asp Ser
                165
                                    170
Phe Tyr Cys Asp Leu Pro Arg Phe Ile Lys Leu Ala Cys Thr Asp Ser
            180
                                185
Tyr Arg Leu Glu Phe Met Val Thr Ala Asn Ser Gly Phe Ile Ser Leu
        195
                            200
                                                205
Gly Ser Phe Phe Ile Leu Ile Ile Ser Tyr Val Val Ile Ile Leu Thr
                       215
                                           220
Val Leu Lys His Ser Ser Ala Gly Leu Ser Lys Ala Leu Ser Thr Leu
                   230
                                        235
Ser Ala His Val Ser Val Val Leu Phe Phe Gly Pro Leu Ile Phe
               245
                                   250
Val Tyr Thr Trp Pro Ser Pro Ser Thr His Leu Asp Lys Phe Leu Ala
                               265
Ile Phe Asp Ala Val Leu Thr Pro Val Leu Asn Pro Ile Ile Tyr Thr
                           280
Phe Arg Asn
    290
<210> 2202
<211> 92
<212> PRT
```

1306

```
<213> Homo sapien (7939486-13-581-990)
<220>
 <221> VARIANT
 <222> (1)...(92)
<223> Xaa = Any Amino Acid
<400> 2202
Cys His Pro Ser His Tyr Phe Ser Ile Leu Ile Arg Phe Leu Cys Leu
                                   10
Tyr Leu Ser Leu Glu Met Gln Ala Ala Cys Ser Ser Ser Xaa Leu Thr
His Thr Ile His Phe Met Lys His Lys Pro Val Leu Thr Asn Ser Leu
                            40
Ser Ser Leu Phe Asn Leu Ser Asn Cys Asp Lys Asn His Thr Ala Leu
                        55
Tyr Pro Val Xaa Pro Pro Met Ile Phe Asp Gln Lys Pro Asn Leu Phe
                   70
                                        75
Phe Val Val Phe Thr Tyr Gly Gln Leu Gly Ser Thr
<210> 2203
<211> 168
<212> PRT
<213> Homo sapien (7996320-1-1-801)
<400> 2203
Lys Gln Ser Ser Gly Asp Ser Gly Asn Gln Thr Thr Trp Leu Ile Leu
                5
1
                                    10
Val Gly Phe Gly Glu Leu Gln Tyr Leu Gly Phe Leu Pro Phe Thr Leu
                                25
Phe Leu Ala Ile Tyr Val Val Thr Val Val Gly Asn Ala Leu Ile Met
                            40
Leu Ala Val Ala Ser Ser Arg Thr Leu His Pro Pro Met Tyr Phe Phe
                        55
                                            60
Leu Cys His Phe Ser Leu Leu Glu Ile Gly Tyr Thr Ser Asn Val Ile
                    70
                                        75
Leu Trp Leu Leu Gln Ser Phe Leu Glu Gly Lys Glu Val Ile Ser Leu
                                    90
Val Ser Cys Leu Ala Gln Phe Tyr Val Phe Ser Ser Leu Ala Ala Ala
            100
                                105
Glu Cys Leu Leu Ser Ala Val Ser Tyr Asp Cys Tyr Leu Ala Ile
       115
                                                125
                           120
Cys Cys Pro Leu His Tyr Pro Ala Leu Met Ser Thr Trp Phe Cys His
                       135
                                           140
Cys Leu Ala Ala Gly Ala Trp Phe Ser Gly Phe Phe Ser Ser Ala Phe
                   150
Thr Met Ala Leu Ala Ala Pro Leu
                165
<210> 2204
<211> 167
<212> PRT
<213> Homo sapien (7996320-11-500-1042)
<220>
<221> VARIANT
<222> (1)...(167)
<223> Xaa = Any Amino Acid
<400> 2204
```

```
Gly Leu Gly Gly Gln Ser Cys Ala Asn Lys Lys Trp Gly Thr Gly
                                   10
Leu Asn Leu Thr Pro Ser Phe His Gly Ser Arg Ser Asn Phe Cys Gly
Pro Xaa Ile Ser Ile His Ser Tyr Ser Leu Gln Ser Phe Leu Pro Val
                           40
Leu Ile Met Asn Leu Tyr Xaa Thr His Cys Ser Xaa Gln Ser Ser Pro
Ile Leu His Tyr Pro Val Gln Val Leu Gly Leu Gly Thr Leu Val Leu
Leu Leu Gly Ser Tyr Ser Cys Ile Ile Met Thr Ala Pro Gly Asp Gln
                                   90
Leu Cys Xaa Gln Gly Arg Ser Lys Ile Leu Ser Thr Cys Ser Ser His
                               105
Tyr Leu Val Val Thr Ile Phe Tyr Thr Ser Gly Phe Leu Arg Tyr Val
                           120
                                               125
Ile Leu Tyr Pro Xaa Ile Xaa Met Arg Asp Ile Pro Tyr Pro Lys Trp
                       135
                                           140
Ser Pro Leu Ala Glu Glu Ser Ile Thr Lys Xaa Gln Asp Ile Gln Lys
                   150
                                       155
Ala Xaa Ala Leu Val Leu Leu
```

<210> 2205

<211> 294

<212> PRT

<213> Homo sapien (8052042-13-4893-7590)

<400> 2205 Ala Thr Tyr Asn Ser Ser Asn Thr Val Val Thr Glu Phe Val Phe Leu 10 Ser Phe Pro Glu Leu His His Leu Gln Gly Leu Leu Phe Val Ser Leu 20 25 Leu Ile Ile Tyr Val Val Thr Ile Leu Glu Asp Leu Ala Val Val Gly 40 ' Thr Ile Arg Ala Ser His His Leu His Ile Ser Thr His Leu Phe Leu 55 Ala Gln Leu Ser Val Leu Glu Thr Leu Tyr Thr Ser Val Thr Val Pro 70 75 Lys Leu Leu Ala Gly Leu Pro Ala Glu Arg Arg Pro Ser Ile Ser Phe 85 90 Ser Gly His Leu Thr Trp Leu Leu Phe Leu Ser Leu Ser Ser Ser 100 105 Glu Cys Val Leu Pro Ala Asn Met Asp Cys Asp Trp His Pro Val Ile 120 125 Cys His Leu Leu His Tyr Leu Ser Pro Ser Trp Thr Pro Cys Ser Trp 135 140 Leu Cys Leu His Leu Ala Ile Ser Ala Gln Leu Ser Ser Phe Pro Ala 155 Ser Phe Val Ser Thr Ala Leu Asn Ser Ser Leu Arg Leu Arg Ser Pro 165 170 Asp Val Leu Asn His Phe Cys Asp Ile Pro Pro Pro Leu Gly Leu Ser 180 185 Cys Ser Ser Thr Thr Thr Ile Glu Met Arg Thr Gln Ala Ala Gln Val 200 205 Ile Leu Ala Ala Ser Leu Gln Ala Thr Thr Val Ser Tyr Thr His Ile 215 220 Leu Ala Arg Ser Leu Arg Ile Pro Glu Arg Pro Ser Lys Leu Lys Ala 230 235 Phe Pro Thr Tyr Ala Ser His Leu Gly Cys Gly Ser Ser Asn Leu Ile

250

Lys Leu Val Ser Gly Val Tyr Leu Val Gly Ile Pro Leu Lys Pro 260 265 Ile Ile Tyr Cys Leu Arg Asn Cys Asn Ile Arg Glu Ala Leu Ala Lys 275 280 Leu Leu Gln Ala Leu Pro 290 <210> 2206 <211> 175 <212> PRT <213> Homo sapien (8052042-5-3342-10968) <220> <221> VARIANT <222> (1)...(175) <223> Xaa = Any Amino Acid <400> 2206 Leu Leu Met Ala Ala Asp Asn His Thr Arg Val Glu Ala Phe Val Leu 1 - 5 10 Gln Gly Phe Ser Glu Asp Leu Pro Leu Gln Gly Cys Cys Phe Ala Phe 20 25 Phe Leu Leu Tyr Leu Met Ala Leu Val Gly Asn Ile Leu Met Val Met 40 Ala Ile Ser Leu Asn Pro Gly Leu His Thr Pro Val Tyr Phe Phe Leu 55 Thr Asn Leu Ala Leu Leu Asp Ile Val Cys Thr Ser Met Asp Asn Ser 70 75 Arg Val Val Ala Val Leu Tyr Thr Val Val Ser Pro Thr Leu Asn Pro 85 90 Ser Pro Thr Pro Cys Gly Thr Arg Thr Tyr Gln Xaa His Xaa Gly Glu 100 105 Cys Phe Leu Ala Ser Gly Lys Arg Lys Gly Ser Phe Xaa Cys Glu Met 115 120 125 Phe Gln Val Leu Thr Asn Xaa Phe Gln His Met Thr Leu Arg Ile Ser 135 140 Cys Lys Gln Gln Gly Thr Arg Lys Xaa Leu Met Pro His Ile Tyr Lys 150 155 160 Xaa Cys Ala Pro Ala Arg Gly Cys His His Ser Met Trp Asn Ser 165 170 <210> 2207 <211> 275 <212> PRT <213> Homo sapien (8072456-16-39461-40850) <400> 2207 Met Val Gly Asn Leu Leu Ile Trp Val Thr Thr Ile Gly Ser Pro Ser Leu Gly Ser Leu Met Tyr Phe Phe Leu Ala Tyr Leu Ser Leu Met Asp 20 25 Ala Ile Tyr Ser Thr Ala Met Ser Pro Lys Leu Met Ile Asp Leu Leu 40 Cys Asp Lys Ile Ala Ile Ser Leu Ser Ala Cys Met Gly Gln Leu Phe 55 Ile Glu His Leu Leu Gly Gly Ala Glu Val Phe Leu Leu Val Val Met 70 75 Ala Tyr Asp Arg Tyr Val Ala Ile Ser Lys Pro Leu His Tyr Leu Asn 85 90 Ile Met Asn Arg Leu Val Cys Ile Leu Leu Leu Val Val Ala Met Ile 105

```
Gly Gly Phe Val His Ser Val Val Gln Ile Val Phe Leu Tyr Ser Leu
                           120
Pro Ile Cys Gly Pro Asn Val Ile Asp His Ser Val Cys Asp Met Tyr
                                            140
                       135
Pro Leu Leu Glu Leu Leu Cys Leu Asp Thr Tyr Phe Ile Gly Leu Thr
                   150
                                       155
Val Val Ala Asn Gly Gly Ile Ile Cys Met Val Ile Phe Thr Phe Leu
                                   170
               165
Leu Ile Ser Cys Gly Val Ile Leu Asn Phe Leu Lys Thr Tyr Ser Gln
                               185
           180
Glu Glu Arg His Lys Ala Leu Pro Thr Cys Ile Ser His Ile Ile Val
                           200
Val Ala Leu Val Phe Val Pro Cys Ile Phe Met Tyr Val Arg Pro Val
                                           220
                       215
Ser Asn Phe Pro Phe Asp Lys Leu Met Thr Val Phe Tyr Ser Ile Ile
                  230
                                       235
Thr Leu Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Gln Ser Glu Met
               245
                                   250
Lys Asn Ala Met Lys Asn Leu Trp Cys Glu Lys Leu Ser Ile Val Arg
                               265
Lys Arg Val
       275
<210> 2208
<211> 316
<212> PRT
<213> Homo sapien (8077072-13-9613-11523)
<220>
<221> VARIANT
<222> (1)...(316)
<223> Xaa = Any Amino Acid
<400> 2208
Met Val Ile Leu Ser Trp Glu Asn Gln Thr Met Arg Val Glu Phe Val
Leu Gln Gly Phe Ser Ser Ile Arg Gln Leu Asn Ile Phe Leu Phe Met
                                25
Ile Ile Leu Val Phe Tyr Ile Leu Thr Val Ser Gly Asn Ile Leu Ile
                           40
                                                45
Val Leu Leu Val Leu Val Arg His His Leu His Thr Pro Met Tyr Phe
                       55
                                            60
Leu Leu Val Asn Leu Ser Cys Leu Glu Ile Trp Tyr Thr Ser Asn Ile
                    70
                                        75
Ile Pro Lys Met Leu Leu Ile Ile Ile Ala Glu Xaa Lys Thr Ile Ser
                                    90
Val Ala Gly Trp Leu Ala Gln Phe Tyr Phe Phe Gly Ser Leu Ala Ala
                                105
            100
Thr Glu Cys Leu Leu Thr Val Met Ser Tyr Asp Arg Tyr Leu Ala
                           120
                                                125
Ile Cys Gln Pro Leu Cys Tyr Arg Val Leu Met Thr Gly Pro Leu Cys
                       135
                                            140
Ile Arg Leu Ala Ala Gly Ser Trp Phe Cys Cys Phe Leu Leu Thr Ala
                                       155
                    150
Ile Thr Met Val Leu Leu Cys Arg Leu Thr Phe Cys Gly Pro Tyr Glu
                165
                                    170
Thr Asp His Phe Phe Cys Asp Phe Thr Pro Leu Val His Leu Ser Cys
            180
                               185
Met Asp Thr Ser Val Thr Glu Thr Ile Ala Phe Ala Thr Ser Ser Ala
                                                205
                           200
Val Thr Leu Ile Pro Phe Leu Leu Ile Val Ala Ser Tyr Ser Cys Val
```

```
210
                        215
                                             220
 Leu Ser Ala Ile Leu Arg Ile Pro Ser Cys Thr Gly Gln Lys Lys Ala
 225
             230
                                        235
 Phe Ser Thr Cys Ser Ser His Leu Thr Val Val Ile Val Phe Tyr Gly
                245
                                    250
 Thr Leu Ile Ala Thr Tyr Leu Val Pro Ser Ala Asn Ser Ser Gln Leu
                                265
 Leu Cys Lys Gly Ser Ser Leu Leu Tyr Ile Ile Leu Thr Pro Met Phe
        275
Asn Pro Ile Ile Tyr Ser Leu Arg Asn Arg Asp Ile His Glu Ala Leu
                        295
                                             300
Lys Lys Cys Leu Arg Lys Lys Ser Gly Val Cys Leu
                    310
<210> 2209
<211> 309
<212> PRT
<213> Homo sapien (8081198-24-6628-8036)
<400> 2209
Met Glu Asn Gln Asn Asn Val Thr Glu Phe Ile Leu Leu Gly Leu Thr
                                    10
Glu Asn Leu Glu Leu Trp Lys Ile Phe Ser Ala Val Phe Leu Val Met
            20
                                25
Tyr Val Ala Thr Val Leu Glu Asn Leu Leu Ile Val Val Thr Ile Ile
                            40
                                                45
Thr Ser Gln Ser Leu Arg Ser Pro Met Tyr Phe Phe Leu Thr Phe Leu
                        55
Ser Leu Leu Asp Val Met Phe Ser Ser Val Val Ala Pro Lys Val Ile
                    70
                                        75
Val Asp Thr Leu Ser Lys Ser Thr Thr Ile Ser Leu Lys Gly Cys Leu
                                    90
Thr Gln Leu Phe Val Glu His Phe Phe Gly Gly Val Gly Ile Ile Leu
                                105
Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
        115
                           120
                                                125
His Tyr Thr Ile Ile Met Ser Pro Arg Val Cys Cys Leu Met Val Gly
    130
                        135
                                            140
Gly Ala Trp Val Gly Gly Phe Met His Ala Met Ile Gln Leu Leu Phe
                    150
                                        155
Met Tyr Gln Ile Pro Phe Cys Gly Pro Asn Ile Ile Asp His Phe Ile
                                    170
                                                        175
Cys Asp Leu Phe Gln Leu Leu Thr Leu Ala Cys Thr Asp Thr His Ile
           180
                                185
Leu Gly Leu Leu Val Thr Leu Asn Ser Gly Met Met Cys Val Ala Ile
                            200
                                                205
Phe Leu Ile Leu Ile Ala Ser Tyr Thr Val Ile Leu Cys Ser Leu Lys
                        215
                                            220
Ser Tyr Ser Ser Lys Gly Arg His Lys Ala Leu Ser Thr Cys Ser Ser
                    230
                                        235
His Leu Thr Val Val Val Leu Phe Phe Val Pro Cys Ile Phe Leu Tyr
               245
                                   250
Met Arg Pro Val Val Thr His Pro Ile Asp Lys Ala Met Ala Val Ser
           260
                               265
Asp Ser Ile Ile Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg
                           280
                                                285
Asn Ala Glu Val Lys Ser Ala Met Lys Lys Leu Trp Met Lys Trp Glu
                       295
Ala Leu Ala Gly Lys
305
```

```
<210> 2210
<211> 270
<212> PRT
<213> Homo sapien (8086488-18-2452-4090)
<400> 2210
Met Glu Val Ser Gly Asn His Thr Ser Val Ala Met Phe Val Leu Leu
                                    10
Gly Leu Ser Asp Glu Lys Glu Leu Gln Leu Ile Leu Phe Pro Val Phe
            20
                                25
Leu Val Ile Tyr Leu Val Thr Leu Ile Trp Asn Met Gly Leu Ile Ile
                            40
                                                 45
Leu Ile Arg Ile Asp Ser His Leu Asn Thr Pro Met Tyr Phe Phe Leu
                        55
Ser Phe Leu Ser Phe Thr Asp Ile Cys Tyr Ser Ser Thr Ile Ser Pro
                    70
                                        75
Arg Met Leu Ser Asp Phe Leu Lys Asp Lys Lys Thr Ile Ser Phe Leu
                                    90
Ala Cys Ala Thr Gln Tyr Phe Leu Gly Ala Trp Met Ser Leu Ala Glu
                                105
Cys Cys Leu Leu Val Ile Met Ala Cys Asp Arg Tyr Val Ala Ile Gly
                            120
Ser Pro Leu Gln Tyr Ser Ala Ile Met Val Pro Ser Ile Cys Trp Lys
                        135
Met Val Ala Gly Val Cys Gly Gly Gly Phe Leu Ser Ser Leu Val His
                    150
                                        155
Thr Val Pro Cys Phe Asn Leu Tyr Tyr Cys Gly Pro Asn Ile Ile Gln
                                    170
                165
His Phe Phe Cys Asn Thr Leu Gln Ile Ile Ser Leu Ser Cys Ser Asn
            180
                                185
Pro Phe Ile Ser Gln Met Ile Leu Phe Leu Glu Ala Ile Phe Val Gly
                            200
Leu Gly Ser Leu Leu Val Ile Leu Leu Ser Tyr Gly Phe Ile Val Ala
                        215
                                            220
Ser Ile Leu Lys Ile Ser Ser Thr Lys Cys Cys Ala Lys Ala Phe Asn
                   230
                                        235
Thr Cys Ala Ser His Leu Ala Ala Val Ala Leu Phe Tyr Gly Thr Ala
               245
                                    250
Leu Ser Val Tyr Met His Pro Ser Ser Ser His Ser Met Lys
            260
                                265
<210> 2211
<211> 161
<212> PRT
<213> Homo sapien (8096828-10-670-2127)
<220>
<221> VARIANT
<222> (1)...(161)
<223> Xaa = Any Amino Acid
<400> 2211
Gly Trp Lys Ser Ser Thr Phe Asn Ile Ser Cys Thr Lys Phe Phe Leu
                                    10
Val Gly Phe Pro Gly Leu Arg Glu Trp Trp Pro Leu Leu Val Leu Pro
                                25
Leu Val Phe Leu Phe Val Thr Ile Ile Ser Ala Asn Ala Leu Val Ile
                            40
His Thr Val Val Ala Arg Gln Asn Leu His Gln Pro Thr Cys Met Leu
                        55
```

Ile Thr Val Leu Leu Ala Val Asn Ile Arg Ala Ala Thr Ala Val Met

```
70
                                         75
 Pro Lys Met Leu Glu Gly Phe Val Tyr Tyr Ala Asn Pro Ile Ser Leu
                                    90
                85
 His Gly Arg Leu Ala Xaa Val Phe Phe Ile Tyr Phe Thr Leu Leu Leu
            100
                                105
 Asp Tyr Asn Phe Leu Trp Pro Trp Pro Trp Thr Gly Tyr Phe Ala Ile
                           120
                                                 125
 Cys His Pro Leu Cys Phe Ser Asp Leu Met Thr Ser Gln Leu Leu Gly
                       135
                                            140
 Leu Leu Ala Ile Leu Ala Phe Glu Gln Ser Pro Gly Ser Asp Pro Ala
                    150
 Pro
 <210> 2212
<211> 198
<212> PRT
<213> Homo sapien (8096828-22-1-1563)
<220>
<221> VARIANT
<222> (1)...(198)
<223> Xaa = Any Amino Acid
<400> 2212
Val Ala Ile Cys His Pro Leu Cys Phe Gln Thr Glu Xaa Leu Pro Ser
                                    10
Trp Leu Gly Leu Leu Ala Ile Leu Ala Leu Thr Gln Ser Trp Gly Val
Thr Val Pro Leu Val Val Leu Thr Ala Lys Ala Asp Phe Cys Arg Thr
                            40
Ala Val Ile Arg His Phe Thr Cys Glu Cys Ile Ala Leu Leu Ser Ile
                        55
Ala Cys Gly Asp Leu Thr Phe Asn Asn Trp Leu Gly Leu Ala Met Cys
Leu Val Thr Val Ile Ser Asp Met Ala Leu Leu Gly Thr Ser Tyr Thr
                                    90
His Ile Ile Tyr Ala Ala Phe Arg Ile Ser Ser Trp Gly Ala Gln Ala
           100
                                105
Lys Ala Leu His Thr Cys Gly Ser His Leu Leu Val Ile Leu Ser Ile
                           120
                                               125
Tyr Val Ser Gly Leu Ser Thr Ser Ile Thr Phe Xaa Val Ala Lys Thr
                        135
                                           140
Val Ser Gln Asn Val Gln Asn Leu Leu Ser Ala Ile Tyr Leu Leu Leu
                   150
                                       155
Pro Gly Ala Leu Asn Pro Val Ile Tyr Gly Val Arg Thr Arg Glu Ile
               165
                                    170
Gln Gln His Val Glu Lys Met Leu Cys Glu Lys Glu Thr Ala Gln Lys
            180
                                185
Ala Gly Glu Lys Pro Lys
        195
<210> 2213
<211> 323
<212> PRT
<213> Homo sapien (8096945-19-338-2509)
<220>
<221> VARIANT
<222> (1)...(323)
<223> Xaa = Any Amino Acid
```

```
<400> 2213
Gly Thr Leu Asn Leu Ser Ser Phe Asn Pro Gly Leu Phe Ile Leu Leu
                                   10
Gly Ile Pro Gly Leu Glu Trp Phe Cys Ile Trp Met Gly Ile Leu Ser
                               25
Phe Thr Ser Tyr Leu Val Ser Leu Ala Gly Asn Val Ile Leu Leu Tyr
                            40
Leu Ile Thr Val Glu His Asn Leu His Lys Pro Met Phe Ser Phe Leu
Ser Ile Pro Ala Ser Ala Asn Leu Ile Leu Cys Ile Thr Tyr Phe Pro
                                        75
Lys Thr Phe Gly Ile Phe Xaa Leu Lys Ala Gln Lys Ile Ile Phe Pro
Gly Cys Phe Thr Arg Phe Phe Phe Gly Leu Leu His Phe Ser Phe
                               105
Phe Leu Asp Leu Ala Ile Leu Leu Gly Leu Ala Phe Asp His Tyr Met
                           120
                                               125
Thr Ile Gly Phe Leu Leu Arg Tyr Thr Ser Gly Leu Thr Pro Arg Thr
    130 • 135
                                          140
Leu Gly Lys Ile Val Val Ser Ile Asp Xaa Arg Phe Asn Asn Ile Leu
                  150
                                       155
Pro Ile Asp Phe Leu Gly Lys His Leu Pro Phe Cys Arg Thr His Ile
               165
                                   170
Asn Ser Asn Thr Tyr Cys Glu His Ile Gly Val Ala Leu Leu Ser Tyr
                                185
Ala Asp Ile Ser Ile Asn Ile Trp Tyr Asp Phe Thr Ile Leu Val Met
                            200
Thr Ile Ile Ser Asp Leu Ile Leu Thr Asp Ile Ser Tyr Thr Leu Thr
                        215
                                           220
Leu His Ala Val Phe His Leu Pro Ser Ser Asp Ala Leu Leu Lys Ala
                    230
                                       235
Leu Ser Thr Cys Gly Ser His Val Ser Val Ile Leu Met Leu Tyr Thr
             245
                                   250
Pro Thr Met Leu Ser Ala Leu Thr His His Phe Gly Gln Ser Ile Ser
                               265
Cys Thr Phe Tyr Ile Met Phe Val Gly Leu Tyr Arg Ala Ile Pro Pro
                           280
Val Leu Asn Ser Ile Ile Tyr Gly Val Lys Thr Lys Gln Ile Gly Asn
                       295
                                           300
Lys Val Ile Leu Leu Phe Phe Leu Lys Gly Met Gln Xaa Tyr Glu Asp
                    310
Glu Asn Met
<210> 2214
<211> 130
<213> Homo sapien (8099799-17-8549-9091)
<220>
<221> VARIANT
<222> (1)...(130)
<223> Xaa = Any Amino Acid
<400> 2214
Phe Xaa Ser Ser Ser Gly Gln Thr Arg His Phe Lys Ala Tyr Glu Xaa
                                   10
His Leu Val Thr Gln Cys Ser Met Leu Trp Val Xaa Asp Xaa Tyr Phe
                               25
Leu Cys Ala Leu Leu Gln Pro Leu His His Gly Ser Lys Ser Xaa Thr
```

```
35
                             40
 Gln Gly Ser Ser Phe Trp Ala Lys Gly Phe Val Leu Glu Val Ile Leu
                         55
 Ser Phe Ser Xaa Xaa Val Ala His Ile Cys Ser Xaa Leu Val Leu Ser
                     70
                                         75
 Ala Phe Ser Cys Leu Xaa Asn Phe Met Ser Leu Thr Ala Phe Phe His
                                     90
 Phe Val Leu Ser Leu Ser Leu Xaa His Lys Leu Val Val Phe Leu Lys
                                105
 Leu Tyr His Phe Xaa Lys Pro Gly Ser Pro Met Tyr Val Met Thr Ile
                             120
 His Ile
    130
 <210> 2215
 <211> 188
 <212> PRT
 <213> Homo sapien (8102357-9-3785-4449)
 <220>
 <221> VARIANT
 <222> (1)...(188)
 <223> Xaa = Any Amino Acid
 <400> 2215
 His Trp Lys Ile Leu Arg Arg Asn Ser Lys Met Ile His Glu Ile Ile
                                     10
 Xaa Thr Leu Cys Gln Ile Leu Tyr Ser Glu Asp Lys Thr Cys Tyr Ile
            20
                                 25
 Gln Ile Gln Ser Leu Phe Cys Thr Asp Leu Glu Ile Pro Asn Phe Phe
                            40
 Cys Glu Leu Asn Xaa Val Val His Leu Ala Cys Ser Asp Thr Phe Leu
                        55
 Lys Asp Ile Val Arg Tyr Cys Thr Thr Met Leu Leu Ser Gly Gly Pro
                    70
                                         75
Ile Ala Gly Ile Phe Tyr Ser Phe Ser Lys Ile Ile Ser Ser Ile Cys
                85
Ala Ile Pro Ser Ala Gln Gly Lys His Lys Ala Phe Pro Thr Cys Val
                                105
Ser His Leu Ser Asn Met Ser Leu Phe Tyr Cys Arg Ser Thr Gly Leu
                            120
                                                125
Tyr Leu Ser Phe Ala Ala Thr His Asn Ser Cys Ser Asn Ala Thr Ala
                        135
                                            140
Ser Val Arg His Thr Val Val Lys Pro Leu Leu Asn Val Phe Ile Leu
                 150
                                        155
Lys Ser Ser Asn Lys Asp Ile Lys Xaa Ala Leu Lys Val Phe Phe Arg
                165
                                    170
Gly Lys Gln Trp Lys His His Phe Ser Lys Ser Ala
<210> 2216
<211> 318
<212> PRT
<213> Homo sapien (8102369-26-1-1971)
Met Ala Gly Glu Asn His Thr Thr Leu Pro Glu Phe Leu Leu Gly
                                    10
Phe Ser Asp Leu Lys Ala Leu Gln Gly Pro Leu Phe Trp Val Val Leu
                                25
Leu Val Tyr Leu Val Thr Leu Leu Gly Asn Ser Leu Ile Ile Leu Leu
```

```
40
                                                45
Thr Gln Val Ser Pro Ala Leu His Ser Pro Met Tyr Phe Phe Leu Arg
                       55
                                           60
Gln Leu Ser Val Val Glu Leu Phe Tyr Thr Thr Asp Ile Val Pro Arg
                   70
                                        75
Thr Leu Ala Asn Leu Gly Ser Pro His Pro Gln Ala Ile Ser Phe Gln
                                    90
Gly Cys Ala Ala Gln Met Tyr Val Phe Ile Val Leu Gly Ile Ser Glu
           100
                               105
Cys Cys Leu Leu Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys
                                                125
                           120
Gln Pro Leu Arg Tyr Ser Thr Leu Leu Ser Pro Arg Ala Cys Met Ala
                        135
                                            140
Met Val Gly Thr Ser Trp Leu Thr Gly Ile Ile Thr Ala Thr Thr His
                   150
                                        155
Ala Ser Leu Ile Phe Ser Leu Pro Phe Arg Ser His Pro Ile Ile Pro
                                    170
               165
His Phe Leu Cys Asp Ile Leu Pro Val Leu Arg Leu Ala Ser Ala Gly
                                185
           180
Lys His Arg Ser Glu Ile Ser Val Met Thr Ala Thr Ile Val Phe Ile
                            200
        195
Met Ile Pro Phe Ser Leu Ile Val Thr Ser Tyr Ile Arg Ile Leu Gly
                        215
                                            220
Ala Asn Leu Ala Met Gly Leu Thr Gln Ser Arg Arg Lys Val Phe Ser
                    230
                                        235
Thr Cys Ser Ser His Arg Leu Val Val Ser Leu Phe Phe Gly Thr Ala
                                    250
                245
Ser Ile Thr Asn Asn Arg Pro Gln Ala Gly Ser Ser Glu Thr Thr Asp
                                265
            260
Arg Val Ile Ser Leu Phe Asn Thr Val Ile Thr Pro Met Leu Asn Pro
                            280
Ile Ile Asn Thr His Gly Asn Lys Asp Val Arg Arg Ala Leu Arg Tyr
                        295
                                            300
Leu Val Lys Arg Arg Arg Pro Ser Pro Gly Arg Gly Ser Gly
                    310
<210> 2217
<211> 109
<212> PRT
<213> Homo sapien (8102369-32-1554-1892)
<220>
<221> VARIANT
<222> (1)...(109)
<223> Xaa = Any Amino Acid
<400> 2217
Tyr Met Val Val Thr Leu Val Leu Val Ile Leu Ser Tyr Ala Phe Ile
                                    10
Ile Lys Thr Ile Leu Lys Leu Pro Ser Ala Gln Gln Arg Thr Lys Ala
                                25
Phe Pro Thr Cys Ser Ser His Met Ile Val Ile Ser Leu Ser Tyr Gly
                            40
Ser Cys Met Phe Met Tyr Ile Asn Pro Ser Ala Lys Asp Arg Asp Thr
                        55
Phe Asn Lys Gly Val Ala Leu Leu Ile Thr Ser Val Ala Pro Leu Leu
                                        75
Asn Pro Phe Ile Tyr Thr Leu Arg Asn Gln Gln Val Arg Gln Pro Phe
                                    90
Lys Asp Met Val Lys Lys Leu Leu Asn Leu Xaa Arg Ile
                                105
```

```
<210> 2218
<211> 131
<212> PRT
<213> Homo sapien (8102369-33-1-1370)
<400> 2218
Met Lys Asn Lys Thr Val Leu Thr Glu Phe Ile Leu Leu Gly Leu Thr
                                    10
Asp Val Pro Glu Leu Gln Val Ala Val Phe Thr Phe Leu Phe Leu Ala
            20
                                25
Tyr Leu Leu Ser Ile Leu Gly Asn Leu Thr Ile Leu Ile Leu Thr Leu
                           40
Leu Asp Ser His Leu Gln Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe
                       55
                                            60
Ser Phe Leu Glu Ile Ser Phe Thr Asn Ile Phe Ile Pro Arg Val Leu
                                        75
Ile Ser Ile Thr Thr Gly Asn Lys Ser Ile Ser Phe Ala Gly Cys Phe
                                    90
               85
Thr Gln Tyr Phe Phe Ala Met Phe Leu Gly Ala Thr Glu Phe Tyr Leu
                               105
           100
Leu Ala Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Leu Met
       115
                            120
                                                125
Thr Met His
   130
<210> 2219
<211> 313
<212> PRT
<213> Homo sapien (8102369-49-1-1012)
<220>
<221> VARIANT
<222> (1)...(313)
<223> Xaa = Any Amino Acid
<400> 2219
Met Pro Asn Lys Ile Val Val Thr Glu Phe Phe Leu Thr Arg Pro Asp
                                   10
Gly Leu Gln Lys Ser Phe Gln Val Ala Val Phe Leu Leu Pro Asp Ala
                               25
Cys His Thr Leu Xaa Leu Ser Leu Gly Thr Xaa Ile Ile Ile Thr Met
                           40
Thr Leu Leu Asp Thr Arg Met Gln Thr Ser Met Tyr Leu Phe Leu Gln
                        55
                                            60
Asn Leu Ser Cys Leu Glu Ile Trp Phe Gln Thr Val Ile Val Pro Lys
                                        75
Met Leu Leu Asn Ile Ala Met Gly Thr Lys Thr Val Ser Phe Ala Gly
                                    90
Cys Ile Thr Gln Asp Phe Phe His Ile Phe Leu Gly Ala Thr Glu Phe
                                105
Phe Leu Leu Thr Ala Met Ala Tyr Asp Gln Tyr Ile Ala Ile Cys Lys
                           120
                                               125
Pro Leu His Tyr Pro Met Leu Ile Ser Ser Arg Val Cys Thr Gln Leu
                                            140
                       135
Ile Leu Thr Cys Trp Leu Leu Gly Phe Ser Phe Ile Ile Met Pro Val
                                        155
                   150
Ile Leu Thr Ser Gln Leu Pro Phe Cys Asp Thr His Ile Lys His Phe
                                    170
                                                        175
               165
Phe Cys Asp Tyr Thr Pro Leu Met Glu Val Val Cys Ser Gly Pro Lys
            180
                                185
```

```
Val Leu Glu Met Val Asp Phe Thr Leu Ala Leu Val Ala Leu Phe Gly
                       200
        195
Thr Leu Val Leu Ile Thr Leu Ser Tyr Val Gln Ile Ile Gln Thr Ile
                        215
                                            220
Val Arg Ile Pro Ala Val Gln Glu Arg Lys Lys Ala Phe Ser Thr Cys
                                        235
                   230
Ser Ser His Val Ile Met Val Thr Met Cys Tyr Asp Ser Cys Phe Phe
                                    250
               245
Met Tyr Val Lys Pro Ser Pro Gly Lys Trp Val Asp Val Asn Lys Gly
                               265
           260
Val Ser Leu Ile Asn Thr Ile Ile Ala Pro Leu Leu Asn Pro Phe Ile
                                               285
                            280
Cys Thr Leu Arg Asn Gln Gln Val Lys Gln Val Met Lys Asp Leu Val
                       295
Arg Lys Met Thr Leu Ser Glu Asn Lys
                   310
<210> 2220
<211> 96
<212> PRT
<213> Homo sapien (8117362-7-1589-1951)
<220>
<221> VARIANT
<222> (1)...(96)
<223> Xaa = Any Amino Acid
<400> 2220
Pro Leu Xaa Leu Met Val Val Ile Phe Ser Gln Val Tyr Thr Leu Ala
                                    10
1
Ala Ile Pro Lys Met Ser Ser Thr Ala Gly Arg Thr Gln Gly Phe Phe
                                25
            20
Met Xaa Ala Ser His Leu Thr Ala Val Val Ile Phe Tyr Gly Thr Pro
                                                45
                            40
Ser Tyr Met Tyr Leu His His Gly Asn Asn Gly Ser Pro Lys Gln Gly
                       55
                                            60
Lys Val Ser Ser Val Phe Tyr Gly Ile Val Ile Asp Leu Ser Leu Arg
                                       75
                   70
Val Gln Asp Ala Arg Glu Ala Leu Lys Glu Lys Gly Lys Lys Gln Phe
                85
<210> 2221
<211> 195
<212> PRT
<213> Homo sapien (8117365-9-1-1453)
<220>
<221> VARIANT
<222> (1)...(195)
<223> Xaa = Any Amino Acid
<400> 2221
Arg Met Phe Xaa Thr Xaa Phe Phe Ser Ser Leu Thr Leu Arg Leu Gln
                                    10
Leu Ser His Leu Phe Pro Cys Leu Gly Tyr Val Phe Ser Leu Leu Gly
                                25
            20
Xaa His Asp Lys Arg Tyr Met Ile Gln Leu Asn Pro Ser Leu Ala Val
                            40
Leu Lys Cys Val Ile Phe Trp Cys Val Cys Val Leu Val Cys Met Ser
                                            60
                       55
Tyr Glu Glu Gly Glu Arg Leu Ser Thr Ser Phe Leu Ala Pro Cys Val
```

```
70
                                         75
 Ser Xaa Leu Trp Val Phe Ile Thr Cys Arg Val Gly Glu Val Phe Gly
                                     90
 Phe Xaa Gly Phe Xaa Ala Ser Gln Xaa Ser His Lys Ile Asn Tyr Cys
                                 105
 Val Asn Ile Val Leu Leu Gly Gly Cys Ile Leu Gln His Thr Xaa Asp
                             120
                                                 125
 Thr Ser Gln Leu Lys Glu Met Ser Ser Glu Met Leu Ala Arg Arg Lys
                        135
                                             140
 Arg Arg Ile Thr Leu Arg Ser Leu Met Gly His Pro Ser Ile Phe Leu
                    150
                                         155
 Leu Arg Arg Ser Lys Ala Gly Ser Ile Ser Xaa Thr Asp Lys Ser Arg
                165
                                    170
 Leu Ser His Arg His Ser Arg Val Arg Leu Tyr Ile Ile Thr Gly Thr
                                185
 Asn Met Val
       195
 <210> 2222
 <211> 318
 <212> PRT
 <213> Homo sapien (8117535-2-10765-15227)
<220>
<221> VARIANT
<222> (1)...(318)
<223> Xaa = Any Amino Acid
<400> 2222
Cys Val Asp Ser Ser Leu Lys Xaa Glu Ile Thr Gln Xaa Cys Leu Ser
                                    10
Leu Leu Xaa Met Ala Glu Gly Trp Arg Leu Tyr Phe Ile Ile Leu
            20
                                25
Ile Ile Ser Tyr Lys Phe Cys Thr Leu Leu Gly Asn Val Ile Phe Arg
                            40
Thr Leu Val Cys Ser Leu Gly Phe His Thr Ser Cys Met Tyr Phe Phe
                        55
                                            60
Pro Xaa Lys Ile Ser Leu Xaa Leu Ala Xaa Val Cys His Ser Ile Ile
                                        75
Ala Leu Pro Ser Thr Gln Lys Xaa Ala Ile Asn Val Gln Gly Ala Ala
                85
                                    90
Val His Val Phe Ser Phe Pro Cys Leu Tyr Cys Pro Glu Ile Phe Leu
                                105
His Ser Leu Thr Gln Cys His Pro Phe Ile Ala Ile Gly Tyr Pro Leu
                            120
                                                125
Gln Gly Met His Thr Ile Thr His Lys Leu Tyr Ile Leu Leu Thr Thr
                        135
                                           140
Gly Pro Trp Arg Gly Cys Xaa Leu His Val Asn Leu Leu Thr Ala Leu
                   150
Leu Gly Ser Tyr Pro Asn Pro Val Pro Thr Lys Leu Trp Leu Ser Phe
               165
                                   170
Pro Ser Ile Pro Glu Val Lys Leu Xaa Pro Met Gln Ala Tyr Thr Lys
                               185
                                                   190
Pro Tyr Ala Gly Leu Ser Leu Cys Leu Ser Leu Ser Leu Ser Leu Ser
                            200
                                               205
Phe Ser Leu Phe Ser Ile Ile Ser Ile Ser Tyr Ile Cys Asn Glu Ile
                                            220
Asp Ile Pro Lys Ile Ile Ser Ala Asp Ser Val His Gly Ala Phe Ser
                   230
                                        235
Thr Cys Leu Ala His Leu Phe Ala Phe Ser Thr Cys Ile Ala Gln Pro
                                    250
```

PCT/US00/27582 WO 01/27158

```
Ala Val Cys Asn Ser Leu Trp Pro Trp Thr Glu Ala Gln Thr Glu Ser
           260
                       265
                                               270
Ser Arg Asp Ser Val Ile Gln Arg Pro Asn Leu Cys Val Thr Ile Ser
       275
                          280
                                              285
Leu Asn Ser Leu Ile Ser Ser Leu Arg Asn Glu Ser Val Lys Gln Ala
                      295
                                          300
Ser His Lys Ile Phe Lys Glu Gln Thr Leu Phe Met Lys Ile
           310
<210> 2223
<211> 304
<212> PRT
<213> Homo sapien (8117535-5-1968-4011)
<220>
<221> VARIANT
<222> (1)...(304)
<223> Xaa = Any Amino Acid
<400> 2223
Met Arg Asn His Thr Leu Leu Asn Glu Phe Ile Leu Arg Gly Ile Pro
        5
                          10
Gln Thr Glu Gly Leu Glu Ala Val Leu Cys Ala Val Phe Ser Phe Ile
                               25
          20
Tyr Leu Phe Thr Leu Leu Gly Asn Leu Leu Ile Leu Ile Ala Ile Phe
                           40
Leu His Thr Pro Met Tyr Phe Phe Leu Gly Arg Leu Ser Thr Phe Asp
                       55
Ile Leu Phe Pro Ser Val Thr Cys Pro Lys Met Leu Leu Tyr Leu Ser
                   70
Gly Gln Ser Pro Val Ile Ser Phe Lys Gly Cys Ala Ser Gln Leu Phe
                                  90
Phe Tyr Gln Leu Leu Gly Ser Ala Glu Gly Cys Leu Tyr Ser Val Met
           100
                               105
Ser Tyr Asp Arg Phe Val Ala Ile His His Thr Leu Arg Tyr Met Leu
                          120
                                              125
Ile Met Lys Pro Gly Val Cys Val Gly Leu Val Val Val Pro Trp Leu
                       135
Val Gly Cys Leu His Ala Thr Ile Leu Thr Ser Phe Thr Phe Gln Leu
                                     155
Ser Tyr Cys Gly Pro Asn Gln Val Asp Tyr Phe Phe Cys Asp Ile Pro
               165
                                  170
Ala Val Leu Pro Leu Ala Cys Thr Asp Ser Ala Leu Ala Gln Arg Val
                                               190
                              185
Gly Ser Ile Asn Val Gly Phe Leu Ala Leu Thr Leu Leu Ile Ser Val
                         200 - 205
      -195 .....
Cys Val Cys Tyr Thr Ser Ile Gly Ile Ala Ile Leu Arg Ile Arg Ser
                                          220
                      215
Ser Glu Gly Arg Gln Lys Ala Phe Ser Thr Cys Ser Ala His Leu Val
                   230
                                      235
Ala Ile Leu Cys Ala Tyr Gly Pro Val Ile Ile Tyr Leu Lys Ser
                                  250
               245
Thr Pro Asn Pro Leu Leu Gly Gly Gln Val Gln Ile Leu Asn Asn Val
                               265
                                                  270
           260
Val Ser Pro Met Leu Asn Ser Leu Ile Tyr Ser Leu Arg Asn Lys Glu
       275
                          280
                                              285
Val Lys Arg Ser Leu Lys Arg Val Phe Xaa Asn Val Leu Leu Thr Val
                                         300
                       295
<210> 2224
```

<211> 268

<212> PRT <213> Homo sapien (8117653-5-5695-6912) <400> 2224 Met Met Ala Leu Ile Phe Thr Asp Ser His Leu Gln Ser Pro Met Tyr 10 Phe Phe Leu Asn Val Leu Ser Phe Leu Asp Ile Cys Tyr Ser Ser Val Val Thr Pro Lys Leu Leu Val Asn Phe Leu Val Ser Asp Lys Ser Ile Ser Phe Glu Gly Cys Val Val Gln Leu Ala Phe Phe Val Val His Val 55 Thr Ala Glu Ser Phe Leu Leu Ala Ser Met Ala Tyr Asp Arg Phe Leu 75 70 Ala Ile Cys Gln Pro Leu His Tyr Gly Ser Ile Met Thr Arg Gly Thr 90 85 Cys Leu Gln Leu Val Ala Val Ser Tyr Ala Phe Gly Gly Ala Asn Ser 105 Ala Ile Gln Thr Gly Asn Val Phe Ala Leu Pro Phe Cys Gly Pro Asn 120 125 Gln Leu Thr His Tyr Tyr Cys Asp Ile Pro Pro Leu Leu His Leu Ala 135 140 Cys Ala Asn Thr Ala Thr Ala Arg Val Val Leu Tyr Val Phe Ser Ala 155 145 150 Leu Val Thr Leu Leu Pro Ala Ala Val Ile Leu Thr Ser Tyr Cys Leu 170 165 Val Leu Val Ala Ile Gly Arg Met Arg Ser Val Ala Gly Arg Glu Lys 185 180 Asp Leu Ser Thr Cys Ala Ser His Phe Leu Ala Ile Ala Ile Phe Tyr 200 205 Gly Thr Val Val Phe Thr Tyr Val Gln Pro His Gly Ser Thr Asn Asn 220 215 Thr Asn Gly Gln Val Val Ser Val Phe Tyr Thr Ile Ile Ile Pro Met 230 235 Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Gly Ala 245 250 Leu Gln Arg Lys Leu Gln Val Asn Ile Phe Pro Gly 260 265 <210> 2225 <211> 184 <212> PRT <213> Homo sapien (8117705-18-1061-1646) <220> <221> VARIANT <222> (1)...(184) <223> Xaa = Any Amino Acid Leu Val Lys Val Lys Lys Asn Xaa Asn Ile Phe Leu Ser Thr Ala Tyr 10 1 His Phe Phe Pro Thr Leu Ser Val Asn Asn Asn Lys Phe Leu Xaa Ile 25 20 Ile Asn Asn Asn Phe Xaa Val Xaa Phe Asn Leu His Ser Glu Thr Ser 40 45 His Ser Xaa Val Tyr Ser Leu Val Leu Ser Ser Lys Val Cys Ile Leu 60 55 Leu Ala Ala Gly Val Val Gly Gly Ile Leu Ser Arg Arg Ile Val Cys 75 70 Gly Pro Thr Val Ser Leu Ser Ser Ser Arg Ser Asn Ala Ile Asn His

• ....

```
90
Phe Phe Cys Asn Lys Ser Leu Gly Leu Gly Leu Ser Cys Tyr Asn Ile
           100
                                105
Tyr Ile Ser Thr Ala Val Pro Ala Phe Val Gly Val Xaa Val Leu His
                                                125
                            120
Ser Leu Pro Tyr Leu Val Ile Met Phe Ser Trp Thr Tyr Ile Leu Val
                       135
                                            140
Ala Ile Lys Arg Met Ser Ser Val Gly Arg Lys Glu Leu Ser Ile Cys
                   150
                                       155
Val Ser His Leu Lys Thr Ser Thr Ile Phe His Thr Ala Leu Phe Tyr
               165
                                    170
Val Tyr Leu Gln Pro Asp Phe Phe
            180
<210> 2226
<211> 148
<212> PRT
<213> Homo sapien (8117705-9-1-790)
<220>
<221> VARIANT
<222> (1)...(148)
<223> Xaa = Any Amino Acid
<400> 2226
Thr Tyr Asp Val Pro Arg Ser Gly Leu Cys Ile Val Ser Tyr Asn Thr
                                    10
Cys Lys Ser Thr Met Met Ser Ile Lys Ile Gln Leu Lys Tyr Met Xaa
Xaa Lys Xaa Leu Leu Ile Tyr Ala Gly Val Tyr Leu Asn Val Thr Met
                            40
Leu Ile Val Thr Phe Lys Tyr Thr His Ile Phe His His Pro Glu Leu
                        55
                                            60
Ala Leu Cys Tyr Val Ser Phe Ser Ala Val Val Phe His Leu Thr Ala
                    70
                                        75
Val Thr Ile Phe Phe Gly Ala Leu Ser Tyr Met Asp Leu Gln Pro Glu
                                    90
Ser Thr Val Phe Gln Glu Gln Glu Asn Pro Ala Ser Ile Phe Cys Gly
                                105
Ile Met Thr Leu Val Leu Asn Phe Leu Ile Tyr Cys Leu Xaa Asn Xaa
                           120
                                               125
Glu Val Lys Glu Ala Leu Gln Leu Thr Arg Lys Lys Tyr Xaa Tyr Met
                      135
   130
Xaa Thr Glu Gly
145
<210> 2227
<211> 115
<212> PRT
<213> Homo sapien (8118143-13-1464-2322)
Met Phe Val Val Ala Gly Phe Asn Phe Thr Tyr Pro Leu Leu Ile Ile
Leu Ile Ser Tyr Leu Tyr Ile Phe Pro Ala Thr Leu Arg Ile Cys Ser
                                25
Thr Glu Gly Arg His Lys Ala Phe Ser Thr Cys Gly Ser His Leu Thr
                            40
                                                45
Ala Val Thr Ile Phe Tyr Ser Ala Leu Phe Phe Met Tyr Leu Arg Arg
                      - 55
Pro Ser Glu Glu Ser Met Glu Gln Gly Lys Met Val Ala Val Phe Tyr
```

```
. 75
65
                   70
Thr Thr Val Ile Pro Met Leu Asn Pro Met Ile Tyr Ser Leu Arg Asn
                            90
             85
Lys Asp Val Lys Glu Ala Leu Cys Lys Glu Leu Phe Lys Arg Lys Leu
                              105
Phe Ser Lys
        115
<210> 2228
<211> 157
<212> PRT
<213> Homo sapien (8118143-4-5591-10363)
<220>
<221> VARIANT
<222> (1) ... (157)
<223> Xaa = Any Amino Acid
<400> 2228
Ile Cys His Asn Arg Lys Val Ile Pro Ala Ser Met Xaa Asn Met Cys
                                  10
Xaa Phe Leu Leu Lys Val Ala Xaa Asp Asn Phe Leu His Val Leu Phe
                                                   30
                            25
         20
Ile Leu Ala Lys Thr Ala Pro Pro Leu Leu Phe Leu Xaa Glu Ile Pro
                          40
Ser Tyr Phe Ser Ser Pro Ser Xaa Ile Ile Val Leu Xaa Cys Leu Pro
                       55
                                           60
Xaa Phe Leu Lys Gln Leu Val Ile Leu Phe Val Phe Leu Leu Leu Asn
                                       75
                   70
Xaa Ser Tyr Leu Thr Leu Ile Phe Met Leu Leu Thr Met Lys Ile Thr
                                   90
Ser Ser Phe Lys Ala Ser Thr Val Ile Ser Cys Leu Gln Phe Pro Ser
                                                  110
                               105
Lys Ala Thr Cys Met His Gly Val Phe Ser Ala Val Cys Ala Gln Met
                                              125
                          120 ...
Xaa Pro Tyr Tyr Asn Gly Xaa Ile Ile Xaa His Pro Glu Ser Ile Thr
                      135
Glu Ser Lys Xaa Leu Thr Cys Val Asn Pro Xaa Phe Asn
                  150
<210> 2229
<211> 320
<212> PRT
<213> Homo sapien (8118143-4-617-5265)
<220>
<221> VARIANT
<222> (1)...(320)
<223> Xaa = Any Amino Acid
<400> 2229
Met Leu Val Pro Lys Lys Met Val Arg Gly Asn Ser Thr Leu Val Thr
                5
                                   10
Glu Phe Ile Leu Leu Gly Leu Lys Asp Leu Pro Glu Leu Gln Pro Ile
                               25
           20
Leu Phe Val Leu Phe Leu Leu Ile Tyr Leu Ile Thr Val Gly Gly Asn
                           40
Leu Gly Met Leu Val Leu Ile Arg Ile Asp Ser Arg Leu His Thr Pro
                       55
                                          60
Met Tyr Phe Phe Leu Ala Ser Leu Ser Cys Leu Asp Leu Tyr Tyr Ser
```

```
Thr Asn Val Thr Pro Lys Met Leu Val Asn Phe Phe Ser Asp Lys Lys
                                    90
Ala Ile Ser Tyr Ala Ala Cys Leu Val Gln Cys Tyr Phe Phe Ile Ala
                                105
                                                    110
           100
Val Val Ile Thr Glu Tyr Tyr Met Leu Ala Val Met Ala Tyr Asp Arg
                                                125
                            120
Tyr Val Ala Ile Cys Asn Pro Leu Leu Tyr Ser Ser Lys Met Ser Lys
                       135
                                            140
Gly Leu Cys Ile Arg Leu Ile Ala Gly Pro Tyr Val Tyr Gly Phe Leu
                   150
                                       155
Ser Gly Leu Met Glu Thr Met Trp Thr Tyr His Leu Thr Phe Cys Gly
                                   170
               165
Ser Asn Ile Ile Asn His Phe Tyr Cys Ala Asp Pro Pro Leu Ile Arg
           180
                               185
Leu Ser Cys Ser Asp Thr Phe Ile Lys Glu Thr Ser Met Phe Val Val
                           200
       195
Ala Xaa Phe Asn Leu Ser Ser Ser Leu Ile Ile Leu Ile Ser Tyr
                       215
                                            220
Ile Phe Ile Leu Ile Ala Ile Leu Arg Met Arg Ser Ala Glu Ser Arg
                   230
                                       235
Arg Lys Ala Phe Ser Thr Cys Gly Ser His Leu Val Ala Val Thr Val
               245
                                   250
Phe Tyr Gly Thr Leu Phe Cys Met Tyr Val Arg Pro Pro Thr Asp Arg
                                                    270
           260
                               265
Ser Val Glu Gln Ser Lys Val Ile Ala Val Phe Tyr Thr Phe Val Ser
                            280
                                                285
Pro Met Leu Asn Pro Ile Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys
                       295
Gln Ala Phe Trp Lys Leu Ile Arg Arg Asn Val Leu Leu Lys Xaa Asn
<210> 2230
<211> 312
<212> PRT
<213> Homo sapien (8118750-5-4885-6910)
<220>
<221> VARIANT
<222> (1)...(312)
<223> Xaa = Any Amino Acid
<400> 2230
Met Xaa Asn Ser Arg Glu Ala Ser Gln Phe Ile Phe Leu Gly Leu Ser
                                    10
Asn Val Pro Glu Leu Gln Val Pro Phe Phe Ile Met Phe Val Leu Ile
           20 -
                                25
Tyr Leu Ile Asn Val Val Gly Asn Leu Gly Met Ile Ile Leu Ile Leu
                            40
Trp Tyr Ser Gln Leu His Asn Pro Met Tyr Phe Phe Phe Ser Asn Leu
                        55
Ser Leu Val Asp Phe Phe Tyr Ser Ser Val Val Thr Pro Lys Val Met
                                        75
                    70
Thr Gly Leu Leu Arg Glu Asp Lys Ile Ile Ser Tyr Thr Val Trp Ala
                                    90
Thr Gln Thr Phe Phe Ser Asp Ser Phe Ala Ser Val Val Asn Leu Leu
                                105
            100
Leu Ala Leu Met Ala Ser Gly His Tyr Ala Ala Val Cys Lys Pro Leu
                            120
                                                125
His Tyr Thr Thr Thr Met Met Thr Ser Val Cys Thr Cys Leu Ala Ile
                    135
                                            140
Gly Xaa Tyr Val Gly Gly Phe Leu Asn Ala Ser Ile His Thr Gly Glu
```

```
155
                    150
 Thr Phe Ser Leu Phe Cys Met Ser Ser Glu Val His His Phe Phe Cys
                165
                                    170
 Glu Val Pro Ala Val Met Ala Leu Ser Cys Ser Asp Arg His Val Asn
                                185
            180
 Val Val Leu Val Tyr Val Thr Ser Phe Asn Ile Leu Phe Ala Leu
                            200
 Leu Val Ile Leu Ile Ser Tyr Leu Leu Met Phe Ile Thr Ile Leu Lys
                        215
Met His Ser Thr Ala Gly Tyr Gln Lys Ala Leu Ala Ile Cys Ala Ser
                    230
                                        235
His Leu Thr Ala Val Ala Ile Phe Tyr Gly Thr Ile Ile Phe Met His
                245
                                    250
Ile Gln Pro Ser Ser Ser His Ser Ile Asp Thr Asp Lys Ile Ala Ala
            260
                                265
Val Phe Tyr Thr Ile Val Phe Pro Met Val Asn His Val Val Xaa Arg
                           280
                                                285
Leu Lys Asn Lys Val Lys Ser Thr Phe Lys Lys Ile Val Glu Lys Val
                       295
Lys Leu Ser Leu Gly Leu Xaa Val
                    310
<210> 2231
<211> 267
<212> PRT
<213> Homo sapien (8118750-8-1-2827)
<400> 2231
Ile Ile Leu Cys Phe Phe Ile Ile Gly Asn Ser Gln Asp Asn Ser Gln
1
                5
                                    10
Met Thr Leu Met Asp Asn Ile Ser Glu Val Thr Glu Phe Val Leu Val
                                25
Gly Leu Thr Asp Val Leu Glu Leu Gln Val Pro Leu Phe Ile Ile Phe
                            40
Thr Val Ile Tyr Leu Thr Thr Leu Val Gly Asn Phe Gly Met Ile Met
                        55
                                            60
Leu Ile Leu Leu Asp Ser Arg Leu His Ile Pro Met Tyr Phe Phe Leu
                    70
                                        75
Gly Lys Leu Ser Leu Val Asp Ser Val Cys Ala Cys Leu Val Thr Gly
                                    90
Ser Tyr Ile Cys Gly Leu Phe Gln Ser Ser Ile His Val Ala Phe Thr
            100
                                105
Phe His Leu Ser Phe Cys His Ser Asn Val Val Asn His Phe Phe Cys
                            120
                                                125
Asp Ile Pro Pro Leu Leu Ala Leu Ser Cys Ser Asp Ile Tyr Ala His
                       135
                                           140
Glu Ile Val Leu Phe Ile Leu Ala Ala Phe Asn Ile Phe Phe Thr Leu
                   150
                                       155
Leu Ile Ile Leu Asn Ser Tyr Val Phe Ile Phe Ile Ala Ile Leu Arg
               165
                                   170
Met His Ser Ala Glu Gly Gln Lys Lys Val Phe Ser Thr Cys Ala Tyr
           180
                               185
                                                    190
His Leu Thr Thr Val Ser Ile Phe Tyr Gly Thr Ile Thr Phe Met Tyr
       195
                           200
                                                205
Leu Gln Pro Ser Ser Gly His Ser Met Asp Thr Asp Lys Ile Ser Ser
                        215
                                           220
Val Phe Tyr Thr Met Val Ile Pro Met Leu Asn Pro Leu Val Tyr Ser
                                       235
Leu Arg Asn Lys Glu Val Gln Ser Ala Phe Lys Val Val Ile Gly Lys
               245
Ala Lys Ser Ser Leu Gly Leu Ala Tyr Tyr Leu
```

260 265

<210> 2232 <211> 309

<212> PRT

<213> Homo sapien (8118822-9-5564-7217)

<220>

<221> VARIANT

<222> (1)...(309)

<223> Xaa = Any Amino Acid

<400> 2232

Glu Xaa Met Gly Thr Ser Asn Asn Val Thr Glu Phe Val Leu Pro Gly 1 5 10 15

Leu Ser Gln Asp Pro Asp Val Gln Lys Ala Leu Phe Val Met Phe Leu 20 25 30

Leu Thr Tyr Asn Val Thr Met Val Gly Asn Leu Leu Ile Val Val Thr 35 40 45

Ile Ile Ala Ile Ala Ser Leu Asp Ser Pro Val Ser Phe Phe Leu Ala 50 55 60

Cys Leu Ser Phe Ile Asp Ala Val Tyr Ser Thr Ser Phe Ser Pro Lys 65 70 75 80

Leu Met Ile Asp Leu Cys Asp Lys Lys Thr Val Ser Phe Leu Ala 85 90 95

Cys Met Gly Gln Leu Phe Ile Asn Tyr Pro Phe Gly Gly Ile Glu Val

Phe Leu Leu Val Gly Met Ala Cys Asp His Tyr Val Asp Ile Cys Lys 115 120 125

Leu Leu His Tyr Leu Thr Ile Met Asn Trp Gln Val Cys Ile Leu Leu 130 135 140

Phe Met Val Ala Val Thr Gly Gly Phe Leu His Ser Met Phe Gln Ile 145 150 155 160

Val Val Val Tyr Ser Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His
165 170 175

Phe Cys Asp Met Tyr Pro Leu Leu Glu Met Val Cys Thr Asp Thr Tyr

180

185

190

Phe Ile Gly Leu Thr Val Ile Ala Asn Gly Gly Ala Val Cys Met Val
195 200 205

Ile Phe Ile Leu Leu Leu Ile Ser Tyr Gly Val Ile Leu Asn Ser Leu : 210 215 220

Lys Thr Tyr Ser Gln Glu Gly Gly His Lys Ala Leu Ser Thr Cys Ser 225 230 235 240

Ser Asn Ile Thr Val Val Ser Leu Phe Phe Asp Pro Cys Ile Phe Ile
245 250 255

Tyr Val Arg Pro Asp Ser Asn Phe Pro Ile Asp Lys Phe Met Thr Val 260 265 270

Phe Tyr Thr Ile Ile Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu 275 280 285

Arg Asn Leu Glu Val Arg Ile Ala Val Lys Asn Leu Trp Cys Lys Asn 290 295 300

Xaa Thr Ile Val Arg 305

<210> 2233

<211> 257

<212> PRT

<213> Homo sapien (8118832-14-2647-3682)

<220>

<221> VARIANT

<222> (1)...(257) <223> Xaa = Any Amino Acid <400> 2233 Ser Met Tyr Phe Phe Leu Thr Asn Phe Ala Gly Leu Glu Ile Phe Tyr 10 Phe Phe Thr Ile Ala Pro Leu Thr Leu Ala Asn Val Leu Pro Met Gly 20 25 Arg Asn Leu Ile Ser Leu Pro Gly Cys Gly Gly Gln Met Phe Phe 40 Ile Phe Leu Gly Arg Ala Asp Cys Ile Leu Leu Ala Val Met Ala Phe 55 Asp Trp Phe Val Ala Ile Cys Cys Pro Leu Cys Tyr Gly Leu Ile Met 75 Ser Trp Arg Leu Cys Val Gln Leu Thr Leu Gly Ser Leu Leu Leu Gly 85 90 Phe Phe Leu Ala Met Gln Leu Thr Val Leu Ile Phe Gln Leu Pro Leu 100 105 Cys Ser Ser Lys Glu Ile Ser Thr Phe Tyr Cys Asp Val Leu Pro Val 120 125 Met Arg Leu Ala Cys Ala Asp Thr Trp Val His Glu Ala Thr Met Ser 135 Met Val Ser Thr Thr Phe Leu Thr Val Pro Phe Leu Leu Ile Thr Leu 150 155 Ser Tyr Val Ser Ile Met Ala Ala Ile Leu Lys Ile Cys Ser Ala Glu 165 170 Gly Arg His Lys Ala Phe Ser Thr Cys Ser Ser His Leu Thr Val Val 180 185 Leu Leu Gln Asp Xaa Cys Thr Arg Leu Ala Phe Leu Cys Pro Ser Ser 200 205 Ser Tyr Tyr Pro Glu Arg Gly Gln Ala Val Ser Val Val Tyr Thr Phe 215 220 Ile Thr Pro Val Leu Asn Pro Leu Ile Tyr Ser Met Arg Asn Thr Glu 230 235 Leu Lys Asp Ala Leu Lys Arg Ala Met Thr Arg Val Pro Leu Leu Xaa 245 250 Thr <210> 2234 <211> 327 <212> PRT <213> Homo sapien (8118892-3-16899-18792) <220> <221> VARIANT <222> (1)...(327) <223> Xaa = Any Amino Acid <400> 2234 Met Glu Gln Arg Lys Asn Val Thr Glu Phe Val Leu Val Gly Leu Thr 10 Gln Ser Pro Gln Gly Gln Lys Ile Leu Phe Leu Val Phe Leu Leu Ile 25 Tyr Val Val Thr Met Val Gly Asn Ile Phe Ile Val Val Thr Val Val Val Ser Pro Thr Leu Gly Cys Pro Met Tyr Phe Phe Leu Gly Tyr Leu 55

75

Ser Phe Met Asp Ala Val His Ser Thr Thr Val Thr Pro Asn Met Ile

Ile Asp Leu Leu Tyr Glu Lys Lys Thr Ile Ser Phe Gln Ala Cys Ile

70

```
90
Thr Gln Ile Phe Ile Gly His Leu Phe Gly Gly Ala Glu Ile Leu Leu
                                105
Leu Val Val Met Ala Tyr Asp Gly Tyr Val Thr Ile Cys Lys Pro Leu
                           120
His Tyr Leu Thr Ile Met Asn Gln Arg Val Cys Ile Leu Leu Leu Leu
                        135
Leu Ala Trp Ala Gly Gly Phe Leu His Ala Val Val Gln Leu Leu Phe
                   150
                                       155
Val Tyr Asn Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Phe Ile
               165
                                   170
Cys Asp Met Tyr Pro Leu Leu Lys Leu Ala Cys Thr Asp Thr Tyr Val
           180
                               185
Thr Gly Leu Thr Val Val Ala Asn Asp Gly Ala Ile Cys Val Val Ile
                           200
                                                205
Phe Met Leu Leu Phe Ser Tyr Gly Val Ile Leu His Ser Leu Lys
                        215
                                            220
Asn Leu Ser Gln Glu Gly Arg His Lys Ala Leu Ser Thr Cys Gly Ser
                    230
                                        235
His Ile Thr Val Val Ile Leu Phe Phe Val Pro Cys Ile Phe Met Tyr
                245
                                    250
Val Arg Pro Pro Leu Thr Leu Pro Ile Asp Lys Ser Leu Thr Val Phe
                                265
Tyr Thr Val Ile Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg
                            280
Asn Ala Glu Met Lys Asn Ala Met Lys Lys Leu Trp Thr Arg Lys Arg
                        295
                                            300
Lys Xaa Gly Gly Asp Lys Cys Ile Ile Tyr Phe Gln Xaa Arg Val Ala
                    310
                                        315
Pro Ser Arg Lys Ala Ile Cys
               325
<210> 2235
<211> 125
<212> PRT
<213> Homo sapien (8118970-10-4947-6912)
<400> 2235
Leu Ala Cys Ala Asp Thr Ser Leu Ala Gln Arg Val Ser Phe Pro Asp
                                    10
Val Gly Leu Ile Ser Leu Val Cys Phe Leu Leu Ile Leu Leu Ser Tyr
           20
                                25
Thr Arg Ile Thr Ile Ser Ile Leu Ser Ile Arg Thr Thr Glu Gly Arg
                            40
Arg Arg Ala Phe Ser Thr Cys Ser Ala His Leu Ile Ala Ile Leu Cys
Ala Tyr Gly Pro Ile Ile Thr Val Tyr Leu Gln Pro Thr Pro Asn Pro
                                        75
Met Leu Gly Thr Val Val Gln Ile Leu Met Asn Leu Val Gly Pro Met
               85
                                   90
Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Lys Glu Val Lys Thr Ala
           100
                               105
Leu Lys Thr Ile Leu His Arg Thr Gly His Val Pro Glu
       115
                            120
<210> 2236
<211> 112
<213> Homo sapien (8118970-16-561-1769)
```

<400> 2236

```
Met Glu Val Lys Asn Cys Cys Met Val Thr Glu Phe Ile Leu Leu Gly
                                     10
  Ile Pro His Thr Glu Gly Leu Glu Met Thr Leu Phe Val Leu Phe Leu
 Pro Phe Tyr Ala Cys Thr Leu Leu Gly Asn Val Ser Ile Leu Val Ala
                             40
 Val Met Ser Ser Ala Arg Leu His Thr Pro Met Tyr Phe Phe Leu Gly
                         55
 Asn Leu Ser Val Phe Asp Met Gly Phe Ser Ser Val Thr Val Pro Lys
                                         75
 Met Leu Leu Tyr Leu Met Gly Leu Ser Arg Leu Ile Ser Tyr Lys Asp
                                    90
 Cys Val Cys Gln Leu Phe Phe Phe His Phe Leu Gly Ser Ile Glu Cys
 <210> 2237
 <211> 287
 <212> PRT
 <213> Homo sapien (8119016-6-4856-7402)
 <220>
 <221> VARIANT
 <222> (1)...(287)
 <223> Xaa = Any Amino Acid
 <400> 2237
 Val Ile Arg Asn Gln Thr Met Val Thr Glu Phe Thr Leu Val Ser Leu
                                     10
 Pro Ala Val Gln Glu Leu Gln Ile Trp Leu Cys Val Leu Leu Trp Leu
                                25
 Val His Met Leu Thr Ile Thr Gly Asn Leu Phe Val Ile Phe Leu Thr
                             40
                                                 45
 Trp Thr Asp Asn Cys Leu Gln Thr Pro Met Asp Leu Phe Leu Glu Lys
                        55
Lys Val Ile Ser Phe Ser Gly Cys Ile Thr Gln Ile Tyr Phe Tyr Phe
                    70
                                        75
Phe Leu Gly Thr Val Ala Phe Ile Pro Leu Ala Val Thr Ser Phe Lys
                85
                                    90
His Cys Met Ala Thr Cys Asp Pro Leu Cys Ser Thr Ile Ile Ala Lys
                                105
Ser Arg Ala Cys Leu Leu Leu Ala Leu Gly Cys Trp Met Gly Thr Phe
    115
                            120
Leu Ala Val Leu Arg Leu Thr Ile Val Val Ser Arg Leu Pro Asp Cys
                        135
                                            140
Thr Glu Lys Ile Ser Pro Phe Phe Cys Asp Ile Ala Ser Leu Leu Gln
                    150
                                        155
Val Ala Cys Ile Asp Ile His Phe Ile Glu Met Ile Ser Phe Leu Xaa
                165
                                    170
Ser Ser Leu Met Val Leu Thr Ser Leu Val Leu Asn Ala Thr Ser Tyr
                                185
Ala Tyr Ile Ile Ser Thr Leu Leu Cys Ile Pro Ser Ala Gln Gly Cys
                            200
                                                205
Gln Glu Ala Phe Ser Thr Cys Ala Ser His Ile Thr Ile Ile Phe Ile
                        215
                                            220
Ala Cys Arg Asn Ser Ile Ser Thr Cys Val Arg Pro Asn Pro Arg Tyr
                   230
                                        235
Xaa Leu Asp Phe Asp Lys Val Thr Ala Ile Leu Thr Ile Val Val Thr
               245
                                   250
Ser Phe Leu Asn Pro Arg Ile Tyr Ser Leu Arg Xaa Arg Lys Tyr Glu
                               265
Gly Ser Xaa Ile Cys Thr Ile Leu Ser Pro His Ser Lys Gly Thr
```

PCT/US00/27582 WO 01/27158

280

285

275 <210> 2238 <211> 210 <212> PRT <213> Homo sapien (8119057-10-2407-4064) <220> <221> VARIANT <222> (1) ... (210) <223> Xaa = Any Amino Acid <400> 2238 Leu Gly Asn Val Ser Thr Glu Thr Thr Phe Ile Phe Val Cys Phe Thr 10 5 Asn Gly Gln Gln Phe Gln Pro Val Cys Phe Ser Ser Phe Xaa Val Leu 25 20 Gly His Ser Val Leu Gly Leu Ser Ser Leu Leu Asn Ile His Gly Glu 40 Leu Val Phe Ser Leu Phe Ser Phe Val Phe Val Phe Gln Met Ser Tyr 60 Ser Phe Val Ile Leu Ile Lys Met Ile Met Asn Ser Ile Ser Glu Arg 75 Tyr Ile Thr Thr Asn Leu Lys Cys Lys Thr Ser Ala Leu Val Phe Ile 90 Cys Phe Ala Ile Ser Glu Thr Leu Ile Leu Leu Ala Trp Gly His Cys 105 100 Gly Ile Cys Val Pro Gln Val Cys Ser Leu Thr Met Leu Gly Leu His 120 115 Gly Val Gly Ile Asp Gly Val Met Ala His Pro Glu Ala Met Val Ser 140 135 Leu Ser Phe Cys Asp Arg Ser Ile Ile Asn His Cys Val Trp His Thr 150 155 Ser Phe His Gln Thr Leu Leu Arg Ala Pro Ala Ser Gln Ala Gly Asp 175 170 165 Phe Val Val Ile Ala Xaa Xaa Leu Ile Ile Phe Ile Ser Asp Ile Leu 185 Ile Leu Ser Thr Ile Leu His Phe Leu Phe Pro Glu Ala Asn Ser Lys 200 205 Ala Phe 210 <210> 2239 <211> 228 <212> PRT <213> Homo sapien (8119057-15-786-3116) <220> <221> VARIANT <222> (1)...(228) <223> Xaa = Any Amino Acid <400> 2239 Met Leu Ile Pro Ser Ser Thr Arg Lys Met Ala Ala Glu Ser His Ser 10 Thr Val Thr Glu Phe Ile Leu Arg Lys Lys Pro Ala Arg Ala Pro Ala 25 Pro Pro Leu Leu Gly Ile Cys Leu Lys Thr Val Val Gly Ala Leu Ile 45 40 Leu Ile Thr Leu Val Phe Leu Asn Ser Gln Leu His Pro Pro Met Tyr

55

```
Tyr Val Ile Arg Asn Leu Ser Phe Met Asp His Cys Asn Cys Ser Ile
                    70
                                         75
 Ser Thr Pro Lys Ile Leu Val Lys Phe Val Leu Glu Lys Thr Ile Ile
                                    90
 Ser Tyr Glu Asp Gly Met Ser Gln Leu Cys Ser Ala Ser Cys Tyr Ile
                                105
            100
 Leu Ser Trp Pro Ser Val Thr Cys Gly Pro Ala Thr Ala Val Ile Thr
        115
                            120
 Phe His Gln Val Ser Ser Leu Leu Val Val Val Tyr Tyr Met Glu
                        135
Leu Thr Gly Thr Thr Ile Glu Phe Cys Leu Val Leu Lys Xaa Tyr Xaa
                    150
                                        155
Cys Glu Leu Phe Ile Ser His Tyr Phe Cys Ser Cys Thr Ser Ile Tyr
                                   170
Asp Ile Asp Arg Thr Ile Phe Phe Phe Thr Xaa Cys Asn Ile Val Val
            180
                            185
Thr Arg Leu Thr Val Val Ser Tyr Ser Phe Leu Ser Ser Ile Leu His
                           200
                                            205
Ile Ser Phe Thr Arg Ala Ala Leu Gly Phe Ser Arg Arg Ser Asp Ala
Phe Met Leu Cys
225
<210> 2240
<211> 277
<212> PRT
<213> Homo sapien (8119057-2-10436-11711)
<220>
<221> VARIANT
<222> (1)...(277)
<223> Xaa = Any Amino Acid
<400> 2240
His Ser Phe Leu Arg Tyr Ile Phe Ala Lys Leu Thr Gly Glu Pro Glu
Leu Gln Pro Ser Leu Tyr Ser Val Phe Trp Ser Pro Xaa Leu Gly Xaa
            20
                                25
Pro His His Thr Ser Met Tyr Pro Leu His Thr Ser Met Tyr Leu Tyr
                            40
Ile Phe Ser Phe Ser Phe Ile Gly Phe Phe Tyr Ser Ser Val Ile Ser
                        55
Pro Gln Met Thr Ile Ser Phe Val Thr Glu Lys Asn Ile Ile Thr Tyr
                    70
                                        75
Val Thr Ser Asn Thr Gln Pro Phe Pro Leu Cys Phe Phe Val Ile Ser
               85
                                   90
Asp Tyr Ser Ile Phe Ile Pro Leu Ala Leu Asp His Tyr Glu Ala Met
           100
                               105
                                                    110
Thr Leu Pro Val Ser Phe Ile Ser Phe Ile Ser Val Asp Gly Ser Xaa
       115
                            120
                                                125
Val Ile Glu Phe Ala Asp Ala Val Val His Gln Gly Ser Met Asp Gln
                        135
                                            140
Phe Leu Phe Cys Asp His Ser Cys Met Ser Leu Asn Leu Cys Asn Ile
                    150
                                        155
Gly Pro Leu Gln Ala Ala Xaa Ile Ser Thr Tyr Val Ser Lys Gln Val
                165
                                    170
Asp Leu Tyr Ser Xaa Glu Pro Ala Val Tyr His Ala Val Leu Ser Phe
                               185
                                                    190
Ser Tyr Phe Val Phe Ile Leu Phe Asn Ile Phe His Xaa Pro Ser Gly
                            200
Pro Asn Leu Gln Pro Asp Ser Ile Asn Leu Phe Ile Ser Phe Phe Gly
```

```
215
                                            220
Leu Gly Thr Phe Met Tyr Leu Arg Ser Pro Glu Ala Met Gly Xaa Cys
             230
                                       235
Lys Phe Thr Val Ser Phe Thr Lys Met Gly Pro Val Met Asn Gly Leu
               245
                                   250
Phe Asn Thr Leu Arg Asn Lys Thr Ile Xaa Leu Ala Ala Met Lys Pro
           260
                                265
Leu Ser Phe Ser Ser
       275
<210> 2241
<211> 125
<212> PRT
<213> Homo sapien (8119057-22-209-1834)
<220>
<221> VARIANT
<222> (1)...(125)
<223> Xaa = Any Amino Acid
<400> 2241
Ile Leu Ser Ser Ile Leu His Ile Ser Ser Thr Glu Gly Arg Ser Lys
1
                                    10
Ala Phe Ser Thr Cys Ser Ser His Ile Ile Val Val Ser Leu Phe Phe
                                25
Gly Ser Gly Ala Phe Met Tyr Leu Lys Pro Pro Ser Ile Leu Pro Leu
                            40
Asp Gln Gly Lys Val Ser Ser Ile Phe Cys Thr Ala Val Val Pro Met
                        55
                                            60
Phe Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Ala
                   70
                                        75
Leu Arg Arg Thr Phe Cys Arg Lys Leu Val Ser Xaa Lys Xaa Met Arg
                                    90
Lys Gly Ile Gln Thr Phe Val Asn Gln Gly Val Ser Phe Leu Phe Phe
                                105
Ser Glu Gly Thr Asn Ala Thr Ala Phe Ser Pro Ile Leu
                           120
<210> 2242
<211> 164
<212> PRT
<213> Homo sapien (8119071-15-1-1473)
<220>
<221> VARIANT
<222> (1)...(164)
<223> Xaa = Any Amino Acid
<400> 2242
Trp Lys Asn His Phe Thr Ser Val Asn Cys Gly Phe Ala Ile Cys Arg
                                    10
Ala Glu Cys Xaa Pro Xaa Pro Lys Ile Leu Ser Ile Ile Gly Leu Lys
           20
                                25
Xaa Asn Ile Asn Glu Thr Leu Xaa Met Leu Asn Tyr Asn Thr Asn His
                           40
Met Val Ser Val Asp Val Leu Ile Val Pro Asn Ser Leu Ile Thr Leu
                       55
Ser Tyr Phe Phe Ile Val Ala Ala Ile Leu His Ile Arg Ser Ala Glu
                                       75
                   70
Gly Arg His Lys Ala Phe Pro Thr Cys Ser Phe His Leu Val Val Ile
```

```
Leu Leu Gln His Asn Ala Thr Ser Leu Thr Tyr Leu Cys Pro Ser Ser
                               105
           100
Ile Phe Ser Tyr Glu Arg Gly Lys Val Val Ser Thr Val Tyr Thr Cys
                                               125
                           120
Ile Thr Pro Val Pro Asn Pro Leu Ile Cys Ser Met Arg Lys Lys Glu
                                           140
                      135
Leu Lys His Ala Leu Lys Lys Lys Glu Glu Ile Ala Arg Phe Leu Leu
                  150
Leu Arg Thr His
<210> 2243
<211> 131
<212> PRT
<213> Homo sapien (8131609-2-31657-32554)
<220>
<221> VARIANT
<222> (1) ... (131)
<223> Xaa = Any Amino Acid
<400> 2243
Ile Ile Tyr Leu Leu Cys Xaa Asp Pro Ala Ile Cys Glu Ser Val Ile
        5
                                   10
Phe Phe Pro Met Gly Phe Ser Asp Cys Leu Pro Ile Leu Ser Ile Met
                                                   30
                               25
           20
Ile Thr Tyr Leu Phe Thr Phe Ile Asp Leu Leu Ile Pro Leu Pro His
                           40
        35
Val Xaa Leu Gln Lys Asp Tyr Tyr Val Cys Ala Ser Asn Leu Thr Val
                       55
Val Ser Thr Phe Ser Xaa Asp His Leu Phe Ser Cys Leu His Ser Ser
                                       75
                   70
Asp Ala Ala Leu Leu Trp Thr Gln Thr Lys Leu His Ser Tyr Phe Ala
                                   90
               85
Ile Val Ile Pro Thr Leu Tyr Pro Leu Val His Ser Leu Lys Asn Arg
                               105
                                                   110
           100
Gly Gly Gln Ser Ala Leu Arg Lys Val Leu Val Lys Ala Lys Ser Gln
       115
                           120
Leu Ser Leu
   130
<210> 2244
<211> 312
<212> PRT
<213> Homo sapien (8131609-3-27134-29103)
<220>
<221> VARIANT
<222> (1)...(312)
<223> Xaa = Any Amino Acid
<400> 2244
Thr Thr Ser Ile Asp Asp Asn Thr Glu Val Asn Glu Phe Ile Xaa Leu
                                   10
Gly Leu Thr Lys Ala Pro Glu Leu Gln Val His Leu Phe Val Leu Phe
                                                   30
                               25
Asn Phe Ile Tyr Leu Phe Thr Leu Ser Gly Asn Leu Gly Met Met Leu
                           40
                                                45
Leu Ile Leu Leu Asp Ser Arg Leu His Thr Ser Met Tyr Phe Phe Leu
                       55
Ser Asn Leu Ser Leu Val Asp Phe Cys Tyr Ser Glu Thr Val Thr Pro
```

```
70
                                       75
Lys Met Met Ala Gly Leu Leu Ile Ala His Lys Val Ile Ser Tyr Asn
                                   90
               85
Val Cys Ala Ala Gln Met Phe Phe Phe Ala Val Phe Ala Thr Val Glu
                               105
           100
Ser Tyr Phe Leu Thr Ser Val Ala Tyr Asp Cys Tyr Arg Val Met Cys
                                               125
                          120
Lys Pro Leu His Tyr Thr Thr Thr Met Thr Thr Asn Val Cys Ala Ser
                                           140
                       135
Leu Ala Ile Ala Cys Tyr Val Leu Gly Leu Leu Thr Ala Ala Val Asp
                  150
                                       155
Ile Gly Asp Ile Cys Met Ser Asn Glu Ile His His Phe Phe Cys Asp
                                   170
               165
Ile Leu Ala Val Met Thr Leu Thr Cys Ser Asn Lys His Ile Asn Glu
                               185
Leu Ile Leu Val Leu Leu Gln Ala Ile Phe Phe Thr Leu Leu Val Ile
                           200
                                               205
Leu Ile Ser Cys Leu Phe Val Phe Val Phe Val Thr Ile Leu Lys Met
                                           220
                       215
His Leu Phe Lys Ser Tyr Lys Lys Val Leu Ser Thr Tyr Gly Ser His
                                       235
               230
Leu Thr Ala Val Pro Leu Phe Tyr Glu Thr Val Leu Ile Thr Tyr Val
                        250
               245
Gln Pro Ser Ser His Phe Met Asn Thr Glu Lys Ile Val Ser Val
                               265
Phe His Ile Met Val Ile Pro Met Leu Ile Pro Val Val Tyr Ser Leu
                           280
Arg Asn Asn Glu Val Lys Ser Ala Phe Lys Thr Val Val Glu Glu Thr
                       295
                                           300
Lys Tyr Phe Leu Gly Leu Val Phe
                   310
<210> 2245
<211> 189
<212> PRT
<213> Homo sapien (8131615-11-1-272)
<220>
<221> VARIANT
<222> (1)...(189)
<223> Xaa = Any Amino Acid
<400> 2245
Ala Thr Lys Glu Leu Cys Phe Leu Gly Val Tyr Ile Pro Lys Gly Asp
                                   10
Ala Cys Trp Lys Xaa Leu Xaa Leu Gly Leu His Leu Leu Leu Gly
                               25
           20
Xaa Gln Val Val Ser Met Val Gly Asn Leu Ala Leu Ile Ala Leu Ile
                           40
Gly Xaa Asn Ser Tyr Leu His His Pro Gln Ala Leu Phe Ser Phe Thr
                       55
Gln Ser Phe Pro Asp Leu Tyr Cys Pro Val Cys Thr Pro Arg Met Leu
                   70
                                       75
Met Thr Phe Val Ser Lys Lys Asn Ile Phe Tyr Val Arg Cys Met Thr
                                   90
Gln Leu Ser Gln Leu Phe Phe Leu Phe Ile Val Leu Ser Ile Lys Tyr
           100
                               105
His Val Leu Met Phe Ile Ala Cys Gly Cys Leu Val Ala Ile Tyr Asn
                          120
                                               125
Pro Ser Leu His Glu Val Thr Met Ser Pro Gln Val Arg Glu Met Arg
                       135
```

```
Glu Ser Gly Phe Ala Gly Thr Thr Ala His Thr Gly His Ile Leu Arg
                                       155
                   150
Pro Asn Leu Cys Asn Ile Asp Val Ile Asn His His Leu Thr Asp Ser
                                   170
               165
Leu Leu Val Leu Xaa Val Ser Cys Thr Ser Thr Cys Ala
<210> 2246
<211> 207
<212> PRT
<213> Homo sapien (8131622-1-12991-13959)
<220>
<221> VARIANT
<222> (1)...(207)
<223> Xaa = Any Amino Acid
<400> 2246
Glu Ile Ile Leu Ile Gly Ile Ser Leu Lys Leu Tyr Leu Val Val Phe
                                10
Thr Ile Ile Lys Ile Lys Xaa His Ser Ile Gly Leu Ser Ser Asn Lys
           20
                               25
Asn Met Arg Leu Pro Ser Asp Phe Phe Leu Ser Gln Ala Ile Tyr Tyr
                           40
                                              45
Xaa Trp Ala Leu Met Cys Val Leu Glu Asn Lys Thr Tyr Ala Ser Val
                      55
Arg Leu Val Xaa Arg Phe Gly Trp Xaa Lys Leu Ala Asn Xaa Met Ser
                                       75
                   70
65
Val Leu Tyr Leu Glu Ala Asn Leu Gly Asn Met Asp Asn Ala Leu Leu
                                    90
Lys Xaa Leu Lys Arg Asn Tyr Phe Val Phe Val Phe Thr Ser Phe Leu
                               105
                                                   110
           100
Phe Gly Cys Ile Ala Phe Lys Xaa Lys Glu Ile Phe Tyr Pro Tyr Thr
                                               125
                           120
       115
Ser Ile Cys Ile Tyr His Leu Leu Met Met Glu Arg Lys Val Ser Cys
                       135
                                           140
Leu Thr Leu Ile Cys Leu Ala Xaa Asp Leu Xaa His Phe Xaa Cys Ser
                  150
                                       155
Leu Val Thr Val Leu Ser Leu Glu Cys Xaa Gln Leu Asp Ile Cys Asn
                                    170
                                                       175
               165
Val Val Thr Tyr Phe Asn Thr Met Val Xaa Ser Thr Thr Gly Ser Asn
                                                  190
           180
                              185
Ser Xaa Thr Pro Asn His Ser Val Leu Ile Cys Asn Met Leu Lys
                           200
       195
<210> 2247
<211> 311
<213> Homo sapien (8131622-11-1950-4442)
<400> 2247
Met Thr Gly Gly Gly Asn Ile Thr Glu Ile Thr Tyr Phe Ile Leu Leu
                                    10
                                                        15
Gly Phe Ser Asp Phe Pro Arg Ile Ile Lys Val Leu Phe Thr Ile Phe
                               25
Leu Val Ile Tyr Ile Thr Ser Leu Ala Trp Asn Leu Ser Leu Ile Val
                                               45
       35
                           40
Leu Ile Arg Met Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu
                                           60
                       55
Ser Asn Leu Ser Phe Ile Asp Val Cys Tyr Ile Ser Ser Thr Val Pro
                   70
                                       75
```

```
Lys Met Leu Ser Asn Leu Leu Gln Glu Gln Gln Thr Ile Thr Phe Val
                                    90
               85
Gly Cys Ile Ile Gln Tyr Phe Ile Phe Ser Thr Met Gly Leu Ser Glu
                               105
Ser Cys Leu Met Thr Ala Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys
                            120
Asn Pro Leu Leu Tyr Ser Ser Ile Met Ser Pro Thr Leu Cys Val Trp
                       135
Met Val Leu Gly Ala Tyr Met Thr Gly Leu Thr Ala Ser Leu Phe Gln
                                        155
                   150
Ile Gly Ala Leu Leu Gln Leu His Phe Cys Gly Ser Asn Val Ile Arg
                                    170
His Phe Phe Cys Asp Met Pro Gln Leu Leu Ile Leu Ser Cys Thr Asp
                               185
                                                    190
Thr Phe Phe Val Gln Val Met Thr Ala Ile Leu Thr Met Phe Phe Gly
                                               205
                            200
Ile Ala Ser Ala Leu Val Ile Met Ile Ser Tyr Gly Tyr Ile Gly Ile
                                            220
                       215
Ser Ile Met Lys Ile Thr Ser Ala Lys Gly Ser Pro Lys Ala Phe Asn
                    230
                                        235
Thr Cys Ala Ser His Leu Thr Ala Val Ser Leu Phe Tyr Thr Ser Gly
                                    250
               245
Ile Phe Val Tyr Leu Arg Ser Ser Ser Gly Gly Ser Ser Ser Phe Asp
            260
                                265
Arg Phe Ala Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro
                            280
                                                285
Leu Ile Tyr Ser Leu Arg Asn Lys Glu Ile Lys Asp Ala Leu Lys Arg
                        295
Leu Gln Lys Arg Lys Cys Cys
                    310
<210> 2248
<211> 444
<212> PRT
<213> Homo sapien (8131622-13-5638-8129)
<221> VARIANT
<222> (1)...(444)
<223> Xaa = Any Amino Acid
<400> 2248
Met Thr Val Glu Arg Ser Ser Met Thr Ile Thr Lys Phe Ile Leu Leu
                                    10
Gly Phe Ser Glu Tyr Ser Lys Thr Thr Ile Phe Leu Phe Ser Val Phe
                                25
Leu Gly Ile Tyr Leu Leu Thr Met Ser Xaa Asn Val Ser Leu Ile Ala
                            40
Leu Ile Arg Thr Asp Ser His Leu His Ala Pro Val Tyr Phe Phe Leu
                        55
                                            60
Ser Asn Pro Ser Phe Leu Asp Ile Cys Cys Val Ser Thr Ile Ala Pro
                    70
                                        75
Lys Met Pro Ser Asp Phe Phe Lys Lys His Lys Phe Ile Ser Phe Met
                                    90
Gly Cys Thr Met Gln Tyr Phe Ser Ser Leu Asn Val Thr Glu Cys Cys
                                105
            100
Leu Leu Thr Ala Met Ala Tyr Asp Xaa Tyr Ala Ala Ile Cys Asp Pro
                           120
                                                125
Leu Leu Tyr Thr Ala Ile Met Ser Pro Ala Leu Cys Met Pro Met Val
                       135
                                            140
Ala Gly Ser Cys Thr Thr Gly Tyr Phe Val Ser Phe Ile Gln Leu Cys
```

```
155
                   150
145
Ala Leu Leu Leu His Phe Cys Glu Ser Asn Ser Ser His Phe Phe
                                   170
               165
Cys Asp Leu Pro Gln Leu Leu Ile Leu Ser Cys Ser His Thr Val Phe
                               185
Phe Phe Ser Ser His Asp His Tyr Ala His Ser Asn Leu Tyr Thr His
                                            205
                          200
Leu Tyr Leu Gly Tyr His Asp Asn Leu Trp Leu Tyr His Cys Gln His
                                          220
                       215
Ser Ser Leu Leu Trp Asp Ala Pro Cys Asn Thr Ser Ser Leu Ala Trp
                                       235
                   230
Val Xaa Leu Ser Ala Val Phe Trp Lys Leu Trp Leu Ile Ile Asp Met
                                   250
               245
Leu Pro Phe Val Thr Leu Cys Ser Thr Trp Pro Ser Met Ser Pro Thr
                               265
                                                  270
           260
Ser Val Cys Thr Xaa Trp Leu Glu Pro Val Xaa Leu Leu Ser Leu Ala
                                               285
                           280
His Leu Ser Asn Tyr Val Leu Cys Phe Ser Ser Ile Ser Val Gly Gln
                      295
                                           300
Ile Val Asn His Phe Phe Cys Asp Leu Pro Gln Leu Leu Ile Leu Ser
                                       315
                   310
Cys Tyr Asp Thr Phe Phe Cys Gln Val Met Thr Ser Met Leu Thr Val
               325
                                  330
Val Phe Gly Leu Thr Ser Val Leu Val Ile Met Ile Phe Tyr Gly Tyr
                               345
                                                   350
           340
Val Ile Ala Thr Ile Leu Lys Ile Ile Ser Val Glu Gly Arg Ser Lys
                           360
       355
Val Phe Asn Thr Gly Gly Ser His Leu Ile Ala Val Thr Leu Phe Tyr
                       375
                                           380
Cys Ser Arg Ile Phe Val Tyr Met Cys Ser His Ser Asp Ala Ser Leu
                                       395
                   390
385
Ser Arg Asn Lys Val Asp Ser Ile Val Tyr Thr Val Val Ile Pro Arg
               405
                                   410
Leu Asn Pro Leu Ile Tyr Ser Leu Ser Asp Lys Xaa Ile Lys Asp Ala
                               425
Leu Lys Arg Trp Thr Lys Arg Ile Phe Ser Trp Pro
<210> 2249
<211> 312
<212> PRT
<213> Homo sapien (8131671-12-1836-3192)
<400> 2249
Met Gly Val Lys Asn His Ser Thr Val Thr Glu Phe Leu Leu Ser Gly
                                   10
Leu Thr Glu Gln Ala Glu Leu Gln Leu Pro Leu Phe Cys Leu Phe Leu
                               25
Gly Ile Tyr Thr Val Thr Val Val Gly Asn Leu Ser Met Ile Ser Ile
                           40
      35
Ile Arg Leu Asn Arg Gln Leu His Thr Pro Met Tyr Tyr Phe Leu Ser
                                           60
                       55
Ser Leu Ser Phe Leu Asp Phe Cys Tyr Ser Ser Val Ile Thr Pro Lys
                                       75
                   70
Met Leu Ser Gly Phe Leu Cys Arg Asp Arg Ser Ile Ser Tyr Ser Gly
                                   90
               85
Cys Met Ile Gln Leu Phe Phe Cys Val Cys Val Ile Ser Glu Cys
                               105
Tyr Met Leu Ala Ala Met Ala Cys Asp Arg Tyr Val Ala Ile Cys Ser
                           120
                                               125
Pro Leu Leu Tyr Arg Val Ile Met Ser Pro Arg Val Cys Ser Leu Leu
```

```
135
                                            140
Val Ala Ala Val Phe Ser Val Gly Phe Thr Asp Ala Val Ile His Gly
                   150
                                       155
Gly Cys Ile Leu Arg Leu Ser Phe Cys Gly Ser Asn Ile Ile Lys His
               165
                                   170
Tyr Phe Cys Asp Ile Val Pro Leu Ile Lys Leu Ser Cys Ser Ser Thr
            180
                               185
Tyr Ile Asp Glu Leu Leu Ile Phe Val Ile Gly Gly Phe Asn Met Val
                            200
Ala Thr Ser Leu Thr Ile Ile Ile Ser Tyr Ala Phe Ile Leu Thr Ser
                        215
                                            220
Ile Leu Arg Ile His Ser Lys Lys Gly Arg Cys Lys Ala Phe Ser Thr
                   230
                                       235
Cys Ser Ser His Leu Thr Ala Val Leu Met Phe Tyr Gly Ser Leu Met
               245
                                   250
Ser Met Tyr Leu Lys Pro Ala Ser Ser Ser Leu Thr Gln Glu Lys
            260
                               265
Val Ser Ser Val Phe Tyr Thr Thr Val Ile Leu Met Leu Asn Pro Leu
        275
                280
                                               285
Ile Tyr Ser Leu Arg Asn Asn Glu Val Arg Asn Ala Leu Met Lys Leu
                       295
Leu Arg Arg Lys Ile Ser Leu Ser
                    310
<210> 2250
<211> 305
<212> PRT
<213> Homo sapien (8131682-2-1-1878)
<400> 2250
Met Gln Arg Ser Asn His Thr Val Thr Glu Phe Ile Leu Leu Gly Phe
                                   10
Thr Thr Asp Pro Gly Met Gln Leu Gly Leu Phe Val Val Phe Leu Gly
                               25
Val Tyr Ser Leu Thr Val Val Gly Asn Ser Thr Leu Ile Val Leu Ile
                            40
                                               45
Cys Asn Asp Ser Cys Leu His Thr Pro Met Tyr Phe Val Val Gly Asn
                       55
Leu Ser Phe Leu Asp Leu Trp Tyr Ser Ser Val Tyr Thr Pro Lys Ile
                   70
                                       75
Leu Val Thr Cys Ile Ser Glu Asp Lys Ser Ile Ser Phe Ala Gly Cys
               85
                                   90
Leu Cys Gln Phe Phe Phe Ser Ala Gly Leu Ala Tyr Ser Glu Cys Tyr
           100
                               105
Leu Leu Ala Ala Val Ala Tyr Asp Arg Tyr Val Ala Ile Ser Lys Pro
            a calesaan .
                          120
                                               125
Leu Leu Tyr Ala Gln Ala Met Ser Ile Lys Leu Cys Ala Leu Leu Val
                       135
                                           140
Ala Val Ser Tyr Cys Gly Gly Phe Ile Asn Ser Ser Ile Ile Thr Lys
                   150
                                       155
Lys Thr Phe Ser Phe Asn Phe Cys Arg Glu Asn Ile Ile Asp Asp Phe
               165
                                   170
Phe Cys Asp Leu Leu Pro Leu Val Glu Leu Ala Cys Gly Glu Lys Gly
           180
                               185
Gly Tyr Lys Ile Met Met Tyr Phe Leu Leu Ala Ser Asn Val Ile Cys
       195
                           200
                                               205
Pro Ala Val Leu Ile Leu Ala Ser Tyr Leu Phe Ile Ile Thr Ser Val
                       215
                                           220
Leu Arg Ile Ser Ser Ser Lys Gly Tyr Leu Lys Ala Phe Ser Thr Cys
                  230
                                      235
Ser Ser His Leu Thr Ser Val Thr Leu Tyr Tyr Gly Ser Ile Leu Tyr
```

```
250
               245
Ile Tyr Ala Leu Pro Arg Ser Ser Tyr Ser Phe Asp Met Asp Lys Ile
                              265
          260
Val Ser Thr Phe Tyr Thr Val Val Phe Pro Met Leu Asn Leu Met Ile
                          280
                                            285
Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Leu Lys Lys Leu Leu
                       295
                                          300
Pro
305
<210> 2251
<211> 306
<212> PRT
<213> Homo sapien (8131682-3-415-2331)
<400> 2251
Met Gln Arg Ser Asn His Thr Val Thr Glu Phe Ile Leu Leu Gly Phe
      5
                        10
Thr Thr Asp Pro Gly Met Gln Leu Gly Leu Phe Val Val Phe Leu Gly
          20
                              25
Val Tyr Cys Leu Thr Val Val Gly Ser Ser Thr Leu Ile Val Leu Ile
                           40
Cys Asn Asp Ser Arg Leu His Thr Pro Met Tyr Phe Val Ile Gly Asn
                      55
Leu Ser Phe Leu Asp Leu Trp Tyr Ser Ser Val His Thr Pro Lys Ile
                  70
                                       75
Leu Val Thr Cys Ile Ser Glu Asp Lys Ser Ile Ser Phe Ala Gly Cys
                                  90
Leu Cys Gln Phe Phe Ser Ala Arg Leu Ala Tyr Ser Glu Cys Tyr Leu
                              105
                                                  110
          100
Leu Ala Ala Met Ala Tyr Asp His Tyr Val Ala Ile Ser Lys Pro Leu
                          120
                                              125
Leu Tyr Ala Gln Thr Met Pro Arg Arg Leu Cys Ile Cys Leu Val Leu
                       135
                                          140
Tyr Ser Tyr Thr Gly Gly Phe Val Asn Ala Ile Ile Leu Thr Ser Asn
                                      155
                  150
Thr Phe Thr Leu Asp Phe Cys Gly Asp Asn Val Ile Asp Asp Phe Phe
                                  170
              165
Cys Asp Val Pro Pro Leu Val Lys Leu Ala Cys Ser Val Arg Glu Ser
           180
                              185
                                                 190
Tyr Gln Ala Val Leu His Phe Leu Leu Ala Ser Asn Val Ile Ser Pro
                                              205
                          200
Thr Val Leu Ile Leu Ala Ser Tyr Leu Ser Ile Ile Thr Thr Ile Leu
                       215
                                           220
Arg Ile His Ser Thr Gln Gly Arg Ile Lys Val Phe Ser Thr Cys Ser
                   230
                                       235
Ser His Leu Ile Ser Val Thr Leu Tyr Tyr Gly Ser Ile Leu Tyr Asn
                                  250
               245
Tyr Ser Arg Pro Ser Ser Ser Tyr Ser Leu Lys Arg Asp Lys Met Val
                               265
           260
Ser Thr Phe Tyr Thr Met Leu Phe Pro Met Leu Asn Pro Met Ile Tyr
                                              285
                          280
Ser Leu Arg Ser Lys Asp Met Lys Asp Ala Leu Lys Lys Phe Phe Lys
                      295
                                          300
Ser Ala
305
<210> 2252
<211> 324
<212> PRT
<213> Homo sapien (8152118-1-59952-61847)
```

```
<220>
<221> VARIANT
<222> (1)...(324)
<223> Xaa = Any Amino Acid
<400> 2252
His Thr Glu Pro Arg Asn Leu Thr Gly Val Xaa Glu Phe Leu Leu
                                   10
Gly Leu Ser Glu Asp Pro Glu Leu Gln Pro Val Leu Ala Leu Leu Ser
           20
                               25
Leu Ser Leu Ser Met Tyr Leu Val Thr Val Leu Arg Asn Leu Leu Ser
                           40
Ile Leu Ala Val Arg Ser Glu Ser Pro Leu His Thr Thr Met Tyr Phe
                                           60
                       55
Phe Leu Ser Ile Leu Cys Trp Ala Asp Ile Gly Phe Thr Ser Ala Thr
                   70
                                       75
Val Pro Lys Met Ile Val Asp Met Gln Trp Tyr Ser Lys Val Ile Ser
                                  90
               85
His Ala Gly Cys Leu Thr Gln Met Ser Phe Leu Val Leu Phe Ala Cys
                              105
                                                   110
           100
Ile Glu Gly Met Leu Leu Thr Val Met Ala Tyr Asp Cys Phe Val Gly
                                               125
                120
Ile Cys Arg Pro Leu His Tyr Pro Val Ile Val Asn Pro His Leu Cys
                       135
                                           140
   130
Val Phe Phe Val Leu Val Ser Phe Phe Leu Ser Leu Leu Asp Ser Gln
                   150
                                       155
Leu His Ser Trp Ile Val Leu Gln Phe Thr Ile Ile Lys Asn Val Glu
                                   170
Ile Ser Asn Phe Val Cys Asp Pro Ser Gln Leu Leu Lys Leu Ala Cys
                               185
           180
Ser Asp Ser Val Ile Asn Ser Ile Phe Ile Tyr Phe Gly Ser Thr Met
       195
                           200
                                               205
Phe Gly Phe Leu Pro Ile Ser Gly Ile Leu Leu Ser Tyr Tyr Lys Ile
                       215
                                           220
Val Pro Ser Ile Leu Arg Ile Ser Ser Asp Gly Lys Tyr Lys Ala
                   230
                                       235
Phe Ser Thr Tyr Gly Ser His Leu Ala Val Phe Cys Xaa Phe Asp Gly
               245
                                   250
Thr Gly Ile Gly Val Tyr Leu Thr Ser Ala Val Ala Pro Pro Pro Arg
           260
                               265
Asn Gly Val Val Val Ser Val Lys Xaa Ala Val Val Thr Pro Met Pro
                          280
                                               285
       275
Asn Leu Phe Ile Tyr Ser Leu Arg Asn Arg Asp Ile Gln Ser Ala Leu
                      295
                                           300
Arg Arg Leu Pro Asn Lys Thr Val Glu Ser Pro Xaa Ser Val Pro Ser
                   310
                                       315
Phe Phe Trp Cys
<210> 2253
<211> 212
<212> PRT
<213> Homo sapien (8247820-10-10207-11695)
<220>
<221> VARIANT
<222> (1)...(212)
<223> Xaa = Any Amino Acid
```

<400> 2253

```
Thr Met Phe Tyr Lys Ile Ser Ala Leu Phe Xaa Cys Xaa Cys Ile Thr
                5
                                   10
Leu Phe Xaa Xaa Lys Leu Ser Lys Gln Lys Ile Tyr Trp Val Leu Thr
                               25
           20
Ile Phe Gly Phe Leu Glu Ala Phe Ile Ala Met Asn Lys Leu Xaa Lys
Leu Tyr Ser Ser Leu Ile Cys Leu Tyr Phe Ile Ile Xaa Ile Phe Lys
                        55
Phe Ser Asn Met Phe Ile Phe Tyr Asn Met Asn Ile Ser Val His Tyr
                                       75
                   70
Phe Leu Lys Cys Ile Phe Phe Phe Cys Ile Cys Cys Leu Xaa Leu Leu
               85
                                   90
Ile Phe Asp Ser Phe Ser Thr His Pro Pro Leu Pro Leu Leu Xaa Glu
                               105
Ala Asp Ile Cys Ala Asn Ser Xaa Pro Cys Tyr Thr Asn Thr Thr Ala
                                               125
                          120
Ser Xaa Xaa His Phe Tyr Ile Ile Leu Asn Phe Cys Leu Ser Tyr Xaa
                                           140
                       135
Pro Ser Val Ser Ser Met Leu Tyr Gly Arg Leu Phe Leu Met Tyr Leu
                                       155
                   150
Met Pro Glu Asn Ser Leu Asp Thr Asp Arg Met Ala Ser Val Phe Tyr
                                   170
               165
Thr Val Val Ile Pro Met Leu Asn Pro Leu Ile Trp Ser Pro Arg Asn
                              185
           180
Lys Asp Val Thr Ser Ala Leu Arg Lys Val Met Val Asn Arg Lys Gln
      195
                           200
Ala Leu Phe Cys
   210
<210> 2254
<211> 314
<212> PRT
<213> Homo sapien (8247820-11-34143-40656)
<220>
<221> VARIANT
<222> (1)...(314)
<223> Xaa = Any Amino Acid
<400> 2254
Ile Xaa Met Ala Asp Arg Asn Val Thr Val Ile Thr Glu Phe Ile Leu
                                   10
Leu Gly Leu Thr Asp Asn Pro Glu Met Asn Val Val Leu Ser Val Leu
                               25
           20
Phe Leu Leu Ile Tyr Leu Ile Thr Val Leu Gly Asn Phe Trp Ile Ile
Ile Ile Leu Ala Ser Ala Gln Leu His Ser Pro Met Tyr Phe Phe
                       55
                                           60
Leu Ser Gln Leu Ala Phe Leu Asp Phe Cys Tyr Ser Ser Val Leu Ile
                                       75
                   70
Pro Lys Met Leu Val Asn Tyr Ile Ala Gly Gln Lys Val Ile Ser Tyr
               85
                                    90
His Gly Cys Leu Leu Gln Tyr Ser Phe Val Ser Leu Phe Leu Thr Thr
                               105
           100
Glu Cys Phe Leu Leu Ala Ala Met Ala Cys Asp Arg Tyr Leu Ala Val
                                    , 125
                           120
Cys His Pro Leu His Tyr Lys Gly Leu Met Thr Pro Thr Phe Xaa Ile
                       135
                                          140
Tyr Leu Val Thr Val Ser Tyr Leu Leu Gly Ser Val Asn Ser Leu Thr
                   150
                                       155
His Leu Ser Ser Leu Leu Ser Leu Ser Phe Cys Gly Ser Asn Val Ile
```

```
170
                                                       175
               165
Asn Arg Tyr Phe Cys Asp Ile Pro Leu Leu Phe Gln Leu Ser Cys Ser
                              185
Asn Thr Gln His Ser Lys Ile Leu Phe Thr Val Leu Ser Gly Ala Thr
                                              205
                          200
Ser Val Thr Thr Phe Leu Ile Val Val Ser Ser Tyr Leu Val Ile Leu
                                          220
                      215
Leu Ile Val Leu Lys Ile His Ser Thr Arg Gly Arg Asn Lys Ala Ile
                                      235
                  230
Ser Thr Cys Ala Ser His Leu Met Val Val Thr Leu Phe Tyr Arg Thr
                     .
                                  250
              245
Val Ile Phe Thr Tyr Leu Gly Ala Asn Pro Gly Tyr Ser Gln Asp Arg
                               265
           260
Pro Lys Ile Leu Pro Val Glu Cys Thr Leu Leu Ser Ile Leu Asn
                          280
Leu Leu Ile Tyr Ser Val Arg Asn Arg Glu Val Lys Glu Ala Ile Lys
                      295
                                           300
Ile Ile Ile Lys Arg Lys Ile Leu Pro Gln
                   310
<210> 2255
<211> 245
<212> PRT
<213> Homo sapien (8247820-7-4578-5918)
<220>
<221> VARIANT
<222> (1)...(245)
<223> Xaa = Any Amino Acid
<400> 2255
Met Ser Xaa Xaa Ile Phe Cys Leu Pro Lys Ile Ile Ile Thr Leu Leu
                                   10
Gln Xaa Glu Trp Asp Ala Leu Asn Leu Glu Thr Arg Val Phe Leu Glu
                               25
Glu Asp Phe Pro Cys Gly Phe Ser Leu Trp Ile Val Arg Gln Leu Ser
                           40
Phe Phe Leu Glu Ile Asn Xaa Phe Ala His Leu Lys Lys Xaa Cys Arg
                       55
Lys His Thr Ser Thr Phe Ser Leu Ser Asn Leu Ala Phe Xaa Asp Phe
                                       75
                   70
     •
Cys Tyr Ala Ser Val Ile Thr Ser Lys Met Phe Gly Ser Phe Leu Tyr
                                   90
               85
Lys Gln Lys Lys Leu Thr Phe Asn Ala Leu Gly Cys Ser Leu Thr Phe
                               105
           100
Met Thr Thr Glu Cys Leu Leu Leu Ala Phe Met Ala Cys Asp Gln Tyr
                                              125
                           120
Leu Val Ile Cys Asn Pro Pro Leu Tyr Met Val Thr Met Ser Pro Pro
                                           140
                       135
Gln Gly Val Cys Ile Gln Leu Met Pro Ala Ser Tyr Ser Tyr Ser Phe
                                       155
                   150
Leu Met Thr Leu Ser His Tyr Leu Ser Ala Phe Arg Leu Pro Tyr Cys
                                                      175
                                   170
               165
Pro Ser Val Ser Leu Met Phe Asn Gly Ser Leu Phe Leu Tyr Cys Thr
                               185
                                                  190
           180
Xaa Cys Ser Glu Asn Ser Leu Asp Thr Asp Arg Met Ala Ser Val Phe
                          200
                                              205
Tyr Thr Val Val Ile Pro Met Leu Ser Pro Leu Ile Trp Ser Leu Arg
                      215
                                           220
Asn Lys Asp Val Lys Asp Ala Leu Arg Lys Val Ile Val Asn Arg Asn
                                       235
```

```
Gln Ala Leu Phe Cys
<210> 2256
<211> 302
<212> PRT
<213> Homo sapien (8308370-1-1-2758)
<220>
<221> VARIANT
<222> (1) ... (302)
<223> Xaa = Any Amino Acid
<400> 2256
Ile Arg Glu Thr His Ser His Val Pro Tyr Thr Ser Val Phe Leu Pro
                        10
Val Phe Tyr Thr Ala Val Phe Leu Thr Gly Val Leu Gly Asn Leu Val
                             25
Leu Met Gly Ala Leu His Phe Lys Pro Gly Ser Arg Arg Leu Ile Asp
           40
                                             45
 35
Ile Phe Ile Ile Asn Leu Ala Ala Ser Asp Phe Ile Val Ser Cys His
                      55
Ile Ala Ser Leu Gly Gly Xaa Arg Thr Ser Leu Gly Leu Trp Arg Thr
                  70
                                  75
Gly Ser Phe Leu Cys Lys Gly Ser Ser Tyr Met Ile Ser Val Asn Met
                                  90
              85
His Cys Ser Val Leu Leu Thr Cys Met Ser Val Asp Arg Tyr Leu
                                                110
                             105
Ala Ile Val Trp Pro Val Val Ser Arg Lys Phe Arg Arg Thr Asp Cys
                         120
                                             125
Ala Tyr Val Val Cys Ala Ser Ile Trp Phe Asn Leu Leu Pro Ala Gly
                                          140
                      135
Val Ala Tyr Ser Ser Val Gln Gly Ala His Ala Val Asp Asp Lys Pro
                                      155
                  150
Tyr Cys Ala Glu Lys Lys Ala Thr Pro Ile Lys Leu Ile Trp Ser Leu
                                 170
              165
Val Ala Leu Ile Phe Thr Phe Phe Val Pro Leu Leu Ser Ile Val Thr
                                                190
                             185
          180
Cys Tyr Cys Cys Ile Ala Arg Lys Leu Cys Ala His Tyr Gln Gln Ser
                                  205
                         200
Gly Lys His Asn Lys Lys Leu Lys Lys Ser Ile Lys Ile Ile Phe Ile
                                         220
                     215
Val Val Ala Ala Phe Leu Val Ser Trp Leu Pro Phe Asn Thr Phe Lys
                                      235
                  230
Phe Leu Ala Ile Val Ser Gly Leu Arg Gln Glu His Tyr Leu Pro Ser
               245
                                  250
Ala Ile Leu Gln Leu Gly Met Glu Val Ser Gly Pro Leu Ala Phe Ala
                              265
           260
Asn Ser Cys Val Asn Pro Phe Ile Tyr Tyr Ile Phe Asp Ser Tyr Ile
                         280
                                             285
     275
Arg Arg Ala Ile Val His Cys Leu Cys Pro Cys Leu Lys Asn
                     295
  290
<210> 2257
<211> 336
<212> PRT
<213> Homo sapien (8318124-7-422-2124)
<220>
<221> VARIANT
<222> (1)...(336)
```

<223> Xaa = Any Amino Acid

```
<400> 2257
Asp Thr Asp Pro Gln Ser Leu Thr Asp Val Ser Ile Phe Leu Leu Leu
                                   10
Glu Leu Ser Glu Asp Pro Glu Leu Gln Pro Val Val Ala Gly Leu Phe
                               25
           20
Leu Ser Met Cys Leu Val Met Val Leu Glu Asn Leu Leu Ile Ile Leu
                           40
Asp Val Ser Pro Asp Ser His Leu Pro Thr Pro Met Tyr Phe Phe Leu
                       55
Ser Asn Leu Ser Leu Pro Asp Ile Gly Phe Thr Ser Thr Thr Val Pro
                   70
Lys Met Ile Val Asp Ile Gln Ser His Ser Arg Val Ile Tyr Ala Gly
               85
Cys Leu Thr Val Met Ser Leu Phe Ala Ile Phe Gly Gly Met Glu Glu
                                105
Asn Met Leu Leu Ser Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys
                            120
His Pro Leu Tyr Arg Ser Ala Thr Leu Asn Pro Cys Phe Cys Gly Phe
                        135
                                           140
Leu Asp Leu Leu Ser Phe Phe Phe Phe Ser Leu Arg Leu Leu Asp Ser
                   150
                                       155
Gln Leu His Asn Leu Ile Ala Leu Gln Met Thr Cys Phe Lys Asp Val
                                   170
               165
Glu Ile Pro Asn Phe Phe Trp Glu Pro Ser Gln Leu Pro His Leu Ala
                               185
           180
Cys Cys Asp Thr Phe Thr Arg Asn Ile Ser Met Tyr Phe Pro Ala Ala
                           200
Val Phe Gly Phe Leu Ser Ile Ser Gly Thr Leu Phe Ser Tyr Cys Lys
                       215
                                           220
Met Val Ser Ser Ile Leu Arg Val Ser Ser Gly Gly Lys Tyr Lys
                                       235
                   230
Ala Phe Ser Thr Xaa Gly Ser His Leu Ser Val Val Cys Xaa Phe Tyr
                                   250
               245
Gly Thr Gly Phe Gly Glu Tyr Leu Gly Ser Asp Val Ser Ser Ser Pro
                               265
Arg Lys Gly Ala Val Ala Ser Val Met Tyr Ser Val Val Thr Pro Met
                           280
       275
Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn Gly Asp Ile Lys Ser Val
                        295
                                           300
Leu Arg Arg Pro Gln Gly Ser Thr Val Ser Ser Gln Tyr Leu Leu Ile
                   310
                                       315
Cys Ser Ile Pro Phe Val Gly Trp Val Asn Lys Asp Ser Lys Val Lys
                                   330
               325
```

- <210> 2258
- <211> 319
- <212> PRT
- <213> Homo sapien (8348136-100-2086-3409)
- <220>
- <221> VARIANT
- <222> (1)...(319)
- <223> Xaa = Any Amino Acid
- <400> 2258
- Ser His Thr Glu Pro Gln Asn Leu Thr Gly Val Ser Glu Phe Leu Leu

   1
   5
   10
   15

   Leu Gly Leu Ser Glu Asp Pro Glu Leu Gln Pro Leu Leu Ala Gly Leu
   20
   25
   30

```
Phe Leu Ser Met Cys Leu Val Thr Met Leu Arg Glu Leu Leu Ile Ile
                           40
Leu Ala Val Thr Ser Asp Ser His Leu His Ile Pro Met Tyr Phe Phe
                       55
Leu Ser Asn Leu Val Leu Gly His Asp Ile Gly Phe Thr Xaa Ala Thr
                   70
Val Pro Lys Met Ile Val Asp Met Gln Ser His Ser Arg Val Ile Ser
               85
His Ala Gly Cys Leu Thr Gln Ile Pro Phe Phe Val Leu Phe Val Cys
           100
                                105
Ile Asp Asp Met Leu Leu Thr Val Met Ala Tyr Asp Xaa Phe Val Ala
                                               125
                           120
       115
Ile Cys His Pro Leu His Tyr Pro Val Ile Met Asn Pro His Leu Cys
                    135
Val Phe Leu Val Leu Met Phe Phe Leu Ser Leu Leu Asp Ser Xaa Leu
                   150
                                       155
His Asn Trp Ile Val Gln Phe Thr Cys Phe Lys Asn Val Glu Ile Ser
               165
                                   170
Asn Phe Phe Cys Asp Xaa Ser Gln Leu Leu Asn Leu Ala Cys Ser Asp
                               185
                                                    190
           180
Val Ile Ser Asn Ile Phe Ile His Leu Asp Ser Thr Ile Phe Gly Phe
                           200
       195
Leu Pro Ile Ser Gly Ile Leu Leu Ser Tyr Tyr Lys Ile Val Pro Ser
                                            220
                       215
Ile Leu Arg Ile Pro Leu Ser Asp Gly Lys Tyr Lys Ala Phe Ser Thr
                                        235
                   230
Cys Gly Ser His Leu Ala Ile Val Cys Leu Phe Tyr Gly Thr Gly Ile
                                    250
               245
Gly Met Tyr Leu Thr Ser Ala Val Ser Pro Ala Pro Arg Asn Gly Val
                                265
Val Ala Ser Val Leu Tyr Ala Ile Val Thr Pro Met Leu Asn Pro Phe
                          280
                                               285
Ile Cys Ser Leu Arg Asn Arg Gly Ile Gln Ser Ala Leu Trp Arg Leu
                     295
                                            300
Cys Arg Arg Lys Val Xaa Ser His Asp Leu Phe His Pro Phe Ser
                   310
                                        315
<210> 2259
<211> 186
<212> PRT
<213> Homo sapien (8389427-13-4913-5701)
<220>
<221> VARIANT
<222> (1)...(186)
<223> Xaa = Any Amino Acid
<400> 2259
Pro Val Pro Gln His Leu Phe Phe Phe Leu Lys Val Thr Gly His Leu
                                    10
Leu Thr Xaa Ile Arg Asn Leu Xaa Phe Val Pro Asp Phe Ser Phe Ser
                                25
           20
Leu Ala Leu His Ile Tyr Gln Xaa Tyr Xaa Phe Xaa Thr Asn Leu Asn
                            40
       35
Glu Leu His Leu Cys Pro Ser Leu Ile Ser Pro Pro Ser Leu Ser Val
                       55
                                            60
His Xaa Leu Arg Leu His His Val Asn Tyr Tyr His Gly Met Leu Thr
                                        75
                   70
Glu Leu Leu Pro Met Val Pro Cys His Asn Ser Ser Phe Ile Trp
                                    90
               85
Leu Pro Ile Asn Phe Xaa Lys Phe Ile Cys Ile Cys Tyr Phe Ser Gly
```

```
105
            100
Xaa Lys Leu Pro Met His Val Glu Asp Gly Met Gln Thr Ala Leu His
                           120
                                               125
Ala Cys Pro Leu Leu Met Gln Leu Leu Leu Ser Ile Pro His Ser Tyr
                       135
                                          140
Pro Leu Leu Asp Asn Ser Phe Leu Phe Leu Arg Leu His Pro Arg
                                      155
                   150
Ser Lys Leu Ser Tyr Phe Leu His Ile Leu Leu Ser Xaa Pro Phe Thr
                                   170
            165
Tyr Val Asn His Leu Leu Pro Phe Leu Leu
            180
<210> 2260
<211> 304
<212> PRT
<213> Homo sapien (8389428-12-1-2464)
<400> 2260
Met Arg Asn Gly Thr Val Ile Thr Glu Phe Ile Leu Leu Gly Phe Pro
Val Ile Gln Gly Leu Gln Thr Pro Leu Phe Ile Ala Ile Phe Leu Thr
            20
                                25
Tyr Ile Leu Thr Leu Ala Gly Asn Gly Leu Ile Ile Ala Thr Val Trp
                           40
Ala Glu Pro Arg Leu Gln Ile Pro Met Tyr Phe Phe Leu Cys Asn Leu
                       55
Ser Phe Leu Glu Ile Trp Tyr Thr Thr Thr Val Ile Pro Lys Leu Leu
                   70
                                       75
Gly Thr Phe Val Val Ala Arg Thr Val Ile Cys Met Ser Cys Cys Leu
                                   90
Leu Gln Ala Phe Phe His Phe Phe Val Gly Thr Thr Glu Phe Leu Ile
                               105
Leu Thr Ile Met Ser Phe Asp Arg Tyr Leu Thr Ile Cys Asn Pro Leu
                           120
                                               125
His His Pro Thr Ile Met Thr Ser Lys Leu Cys Leu Gln Leu Ala Leu
                      135
                                           140
Ser Ser Trp Val Val Gly Phe Thr Ile Val Phe Cys Gln Thr Met Leu
                                       155
                  150
Leu Ile Gln Leu Pro Phe Cys Gly Asn Asn Val Ile Ser His Phe Tyr
               165
                                   170
Cys Asp Val Gly Pro Ser Leu Lys Ala Ala Cys Ile Asp Thr Ser Ile
                               185
Leu Glu Leu Leu Gly Val Ile Ala Thr Ile Leu Val Ile Pro Gly Ser
                           200
                                                205
Leu Leu Phe Asn Met Ile Ser Tyr Ile Tyr Ile Leu Ser Ala Ile Leu
                       215
                                           220
Arg Ile Pro Ser Ala Thr Gly His Gln Lys Thr Phe Ser Thr Cys Ala
                   230
                                       235
Ser His Leu Thr Val Val Ser Leu Leu Tyr Gly Ala Val Leu Phe Met
                                   250
                245
Tyr Leu Arg Pro Thr Ala His Ser Ser Phe Lys Ile Asn Lys Val Val
           260
                               265
Ser Val Leu Asn Thr Ile Leu Thr Pro Leu Leu Asn Pro Phe Ile Tyr
                           280
                                               285
Thr Ile Arg Asn Lys Glu Val Lys Gly Ala Leu Arg Lys Ala Met Thr
<210> 2261
<211> 275
<212> PRT
<213> Homo sapien (8439748-1-6412-8052)
```

```
<220>
<221> VARIANT
<222> (1)...(275)
<223> Xaa = Any Amino Acid
<400> 2261
Thr Ile Ile Asn Val Asn Ile Ser Pro Glu Phe Val Leu Val Gly Phe
                                    10
Ser Ser Asp Ala Glu Ile Gln Ile Met Leu Phe Val Leu Ile Leu Val
           20
                                25
                                                    30
Ile His Leu Leu Thr Leu Thr Gly Lys Leu Val Met Ile Leu Glu Ile
                                                45
                            40
Arg Ala Asp Ser His Leu Gln Arg Pro Met Tyr Phe Phe Leu Xaa His
                                            60
                        55
Leu Ser Phe Leu Asp Leu Ser Tyr Ser Ser Val Thr Val Pro Arg Met
                   70
                                        75
Leu Gln Asn Phe Leu Ser Gly Arg Lys Ala Ser Gln Cys Gly Ala Ala
                                   90
               85
Ser Pro Ser Phe Phe Phe Thr Leu Ser Gly Gly Thr Glu Ala Cys Leu
                                                    110
                               105
Phe Ser Ala Met Ala Tyr Asp His Tyr Ala Thr Ile Arg His Pro Val
                           120
                                                125
       115
Val Tyr Thr Met Val Met Asn Arg Ser Leu Cys Met Val Ile Leu Arg
                        135
Ile Ala Trp Ala Ala Gly Phe Leu Ile Ser Leu Met Asp Ser Leu Phe
                   150
                                        155
Thr His Lys Leu His Phe Cys Gly Pro Asp Ile Ile Pro Tyr Phe Arg
                                   170
                165
Cys Lys Leu Pro Pro Phe Phe Pro Leu Ser Tyr Ile Asp Pro Thr Val
                                                    190
           180
                               185
Asn Glu Ile Leu Leu Ala Val Ser Gln Ala Phe Trp Gly Leu Leu Thr
                                                205
                           200
Leu Ser Leu Ile Phe Phe Ser Tyr Ser Arg Ile Thr Ser Val Ile Leu
                                            220
                       215
Ser Ile Cys Ser Ser Glu Gly Gln Gly Lys Ala Phe Ser Ala Cys Pro
                                        235
                   230
Ser His Leu Ala Val Val Leu Ser Phe Tyr Gly Thr Ala Phe Phe Arg
                                 250
                245
Tyr Pro Gly Ser Thr Ser Gly Ser Val Leu Gly Gln Val Val Ser Val
                               265
           260
Gln Tyr Ser
       275
<210> 2262
<211> 317
<212> PRT
<213> Homo sapien (8439748-5-3942-6516)
<400> 2262
Met Leu Arg Asn Gly Ser Ile Val Thr Glu Phe Ile Leu Val Gly Phe
                5
                                    10
Gln Gln Ser Ser Thr Ser Thr Arg Ala Leu Leu Phe Ala Leu Phe Leu
                                25
           20
Ala Leu Tyr Ser Leu Thr Met Ala Met Asn Gly Leu Ile Ile Phe Ile
                                                45
       35
                           40
Thr Ser Trp Thr Asp Pro Lys Leu Asn Ser Pro Met Tyr Phe Phe Leu
                       55
                                            60
Gly His Leu Ser Leu Leu Asp Val Cys Phe Ile Thr Thr Thr Ile Pro
                   70
                                        75
Gln Met Leu Ile His Leu Val Val Arg Asp His Ile Val Ser Phe Val
```

```
90
                85
Cys Cys Met Thr Gln Met Tyr Phe Val Phe Cys Val Gly Val Ala Glu
            100
                               105
Cys Ile Leu Leu Ala Phe Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys
                           120
Tyr Pro Leu Asn Tyr Val Pro Ile Ile Ser Gln Lys Val Cys Val Arg
                                            140
                       135
Leu Val Gly Thr Ala Trp Phe Phe Gly Leu Ile Asn Gly Ile Phe Leu
                   150
                                       155
Glu Tyr Ile Ser Phe Arg Glu Pro Phe Arg Arg Asp Asn His Ile Glu
                                   170
               165
Ser Phe Phe Cys Glu Ala Pro Ile Val Ile Gly Leu Ser Cys Gly Asp
                                185
                                                    190
Pro Gln Phe Ser Leu Trp Ala Ile Phe Ala Asp Ala Ile Val Val Ile
                           200
                                                205
Leu Ser Pro Met Val Leu Thr Val Thr Ser Tyr Val His Ile Leu Ala
                       215
                                            220
Thr Ile Leu Ser Lys Ala Ser Ser Ser Gly Arg Gly Lys Thr Phe Ser
                                        235
                   230
Thr Cys Ala Ser His Leu Thr Val Val Ile Phe Leu Tyr Thr Ser Ala
               245
                                    250
Met Phe Ser Tyr Met Asn Pro His Ser Thr His Gly Pro Asp Lys Asp
                                265
           260
Lys Pro Phe Ser Leu Leu Tyr Thr Ile Ile Thr Pro Met Cys Asn Pro
                            280
Ile Ile Tyr Ser Phe Arg Asn Lys Glu Ile Lys Glu Ala Met Val Arg
                       295
Ala Leu Gly Arg Thr Arg Leu Ala Gln Pro Gln Ser Val
                    310
<210> 2263
<211> 320
<212> PRT
<213> Homo sapien (8439993-14-9565-12410)
<400> 2263
Met Leu His Thr Asn Asn Thr Gln Phe His Pro Ser Thr Phe Leu Val
                                    10
Val Gly Val Pro Gly Leu Glu Asp Val His Val Trp Ile Gly Phe Pro
                                25
Phe Phe Ala Val Tyr Leu Thr Ala Leu Leu Gly Asn Ile Ile Leu
                            40
Phe Val Ile Gln Thr Glu Gln Ser Leu His Gln Pro Met Phe Tyr Phe
                       55
Leu Ala Met Leu Ala Gly Thr Asp Leu Gly Leu Ser Thr Ala Thr Ile
Pro Lys Met Leu Gly Ile Phe Trp Phe Asn Leu Gly Glu Ile Ala Phe
Gly Ala Cys Ile Thr Gln Met Tyr Thr Ile His Ile Cys Thr Gly Leu
                                105
                                                    110
Glu Ser Val Val Leu Thr Val Thr Gly Ile Asp Arg Tyr Ile Ala Ile
                            120
                                                125
Cys Asn Pro Leu Arg Tyr Ser Met Ile Leu Thr Asn Lys Val Ile Ala
                       135
                                            140
Ile Leu Gly Ile Val Ile Ile Val Arg Thr Leu Val Phe Val Thr Pro
                                       155
                   150
Phe Thr Phe Leu Thr Leu Arg Leu Pro Phe Cys Gly Val Arg Ile Ile
                                    170
               165
Pro His Thr Tyr Cys Glu His Met Gly Leu Ala Lys Leu Ala Cys Ala
                               185
Ser Ile Asn Val Ile Tyr Gly Leu Ile Ala Phe Ser Val Gly Tyr Ile
```

```
200
       195
Asp Ile Ser Val Ile Gly Phe Ser Tyr Val Gln Ile Leu Arg Ala Val
                                        220
    210
                       215
Phe His Leu Pro Ala Trp Asp Ala Arg Leu Lys Ala Leu Ser Thr Cys
                  230
                                       235
Gly Ser His Val Cys Val Met Leu Ala Phe Tyr Leu Pro Ala Leu Phe
                                   250
               245
Ser Phe Met Thr His Arg Phe Gly His Asn Ile Pro His Tyr Ile His
                                                  270
                               265
Ile Leu Leu Ala Asn Leu Tyr Val Val Phe Pro Pro Ala Leu Asn Ser
                          280
                                              285
Val Ile Tyr Gly Val Lys Thr Lys Gln Ile Arg Glu Gln Val Leu Arg
                     295
                                          300
Ile Leu Asn Pro Lys Ser Phe Trp His Phe Asp Pro Lys Arg Ile Phe
                                       315
<210> 2264
<211> 329
<212> PRT
<213> Homo sapien (8439993-17-12459-15729)
<220>
<221> VARIANT
<222> (1)...(329)
<223> Xaa = Any Amino Acid
<400> 2264
Met Asn Gly Ala Asn Ser Ser Ser Leu Thr Pro Arg Tyr Phe Ile Leu
               5
                                   10
1
Ser Gly Val Pro Gly Leu Glu Ala Ala His Ile Trp Ile Ser Leu Pro
                               25
           20
Phe Cys Phe Met Tyr Ile Ile Val Val Leu Gly Asn Cys Gly Leu Ile
                           40
Tyr Leu Ile Ser His Glu Glu Ala Leu His Gln Pro Thr Tyr Tyr Phe
                       55
                                           60
Leu Asp Leu Leu Ser Leu Thr Asp Val Thr Gly Cys Thr Ser Phe Val
                   70
Pro Asn Met Leu Cys Ile Phe Trp Phe Gly Leu Lys Glu Ile Asp Phe
                                   90
              85
Asn Ala Cys Leu Val Gln Met Phe Phe Ile His Met Leu Thr Gly Met
           100
                              105
Glu Ser Gly Ala Leu Met Leu Met Ala Leu Asp Arg Tyr Val Ala Ile
                          120
                                            125
       115
Cys Tyr Pro Leu His Tyr Ser Thr Ile Phe Thr Asn Thr Val Ile Thr
                                          140
                      135
Lys Val Gly Leu Val Thr Phe Ile Gln Ser Val Leu Leu Met Ile Pro
                  150
                                      155
Phe Ala Phe Leu Ile Lys Cys Leu Pro Tyr Cys Arg Gly Asn Leu Ile
                                  170
              165
His His Thr Tyr Cys Xaa His Met Ser Val Ala Lys Leu Ser Cys Gly
                                                   190
           180
                               185
Asn Val Gln Ile Asn Ala Ile Tyr Gly Leu Ile Ala Ala Ile Leu Ile
       195
                           200
                                               205
Gly Gly Phe Asp Met Phe Cys Ile Ser Met Ser Tyr Thr Met Ile Ile
                                           220
                       215
Arg Ala Val Val Asn Leu Ser Ser Ala Asp Ala Arg His Lys Ala Phe
                   230
                                       235
225
Ser Thr Cys Thr Ala His Ile Cys Ala Ile Phe Ile Thr Tyr Val Pro
                                   250
               245
Ala Phe Phe Asn Phe Phe Thr His Arg Phe Gly Gly His Thr Ile Pro
           260 ·
                               265
```

```
His His Val His Ile Phe Ile Ala Asn Leu Tyr Leu Met Leu Pro Pro
                           280
                                               285
Thr Leu Asn Pro Ile Val Tyr Gly Val Lys Thr Lys Gln Ile Arg Glu
                       295
                                           300
Gly Val Ile Lys Leu Phe Phe Arg Glu Lys Val Tyr Phe Lys Tyr Asp
                   310
                                      315
Ile Asn Leu Xaa Tyr Arg Ser Leu Asn
               325
<210> 2265
<211> 324
<212> PRT
<213> Homo sapien (8439993-2-191-1624)
<400> 2265
Met Pro Leu Phe Asn Ser Leu Cys Trp Phe Pro Thr Ile His Val Thr
                                   10
Pro Pro Ser Phe Ile Leu Asn Gly Ile Pro Gly Leu Glu Arg Val His
                               25
                                                   30
           20
Val Trp Ile Ser Leu Pro Leu Cys Thr Met Tyr Ile Ile Phe Leu Val
                           40
                                               45
Gly Asn Leu Gly Leu Val Tyr Leu Ile Tyr Tyr Glu Glu Ser Leu His
                                           60
                       55
His Pro Met Tyr Phe Phe Phe Gly His Ala Leu Ser Leu Ile Asp Leu
                   70
                                       75
Leu Thr Cys Thr Thr Thr Leu Pro Asn Ala Leu Cys Ile Phe Trp Phe
                                   90
               85
Ser Leu Lys Glu Ile Asn Phe Asn Ala Cys Leu Ala Gln Met Phe Phe
           100
                               105
Val His Gly Phe Thr Gly Val Glu Ser Gly Val Leu Met Leu Met Ala
                            120
                                               125
       115
Leu Asp Arg Tyr Val Ala Ile Cys Tyr Pro Leu Arg Tyr Ala Thr Thr
                        135
                                           140
Leu Thr Asn Pro Ile Ile Ala Lys Ala Glu Leu Ala Thr Phe Leu Arg
                   150
                                       155
Gly Val Leu Leu Met Ile Pro Phe Pro Phe Leu Val Lys Arg Leu Pro
                                   170
                165
Phe Cys Gln Ser Asn Ile Ile Ser His Thr Tyr Cys Asp His Met Ser
                               185
           180
Val Val Lys Leu Ser Cys Ala Ser Ile Lys Val Asn Val Ile Tyr Gly
                           200
                                               205
Leu Met Val Ala Leu Leu Ile Gly Val Phe Asp Ile Cys Cys Ile Ser
                        215
                                           220
Leu Ser Tyr Thr Leu Ile Leu Lys Ala Ala Ile Ser Leu Ser Ser
                                       235
                   230
Asp Ala Arg Gln Lys Ala Phe Ser Thr Cys Thr Ala His Ile Ser Ala
                                   250
               245
Ile Ile Ile Thr Tyr Val Pro Ala Phe Phe Thr Phe Phe Ala His Arg
                               265
           260
Phe Gly Gly His Thr Ile Pro Pro Ser Leu His Ile Ile Val Ala Asn
       275
                           280
Leu Tyr Leu Leu Pro Pro Thr Leu Asn Pro Ile Val Tyr Gly Val
                                           300
                       295
Lys Thr Lys Gln Ile Arg Lys Ser Val Ile Lys Phe Phe Gln Gly Asp
                   310
                                       315
Lys Gly Ala Gly
<210> 2266
<211> 312
<212> PRT
```

1350

<213> Homo sapien (8516051-13-18887-21998)

```
<400> 2266
Met Asp Thr Gly Asn Trp Ser Gln Val Ala Glu Phe Ile Ile Leu Gly
1
                                    10
Phe Pro His Leu Gln Gly Val Gln Ile Tyr Leu Phe Leu Leu Leu
                                25
Leu Ile Tyr Leu Met Thr Val Leu Gly Asn Leu Leu Ile Phe Leu Val
        35
                           40
Val Cys Leu Asp Ser Arg Leu His Thr Pro Met Tyr His Phe Val Ser
                        55
Ile Leu Ser Phe Ser Glu Leu Gly Tyr Thr Ala Ala Thr Ile Pro Lys
                                        75
                   70
Met Leu Ala Asn Leu Leu Ser Glu Lys Lys Thr Ile Ser Phe Ser Gly
                                   90
Cys Leu Leu Gln Ile Tyr Phe Phe His Ser Leu Gly Ala Thr Glu Cys
                               105
            100
Tyr Leu Leu Thr Ala Met Ala Tyr Asp Arg Tyr Leu Ala Ile Cys Arg
                           120
       115
Pro Leu His Tyr Pro Thr Leu Met Thr Pro Thr Leu Cys Ala Glu Ile
                       135
                                           140
Ala Ile Gly Cys Trp Leu Gly Gly Leu Ala Gly Pro Val Val Glu Ile
                                       155
                  150
Ser Leu Ile Ser Arg Leu Pro Phe Cys Gly Pro Asn Arg Ile Gln His
                                   170
               165
Val Phe Cys Asp Phe Pro Pro Val Leu Ser Leu Ala Cys Thr Asp Thr
                                                    190
           180
                                185
Ser Ile Asn Val Leu Val Asp Phe Val Ile Asn Ser Cys Lys Ile Leu
                                                205
                           200
        195
Ala Thr Phe Leu Leu Ile Leu Cys Ser Tyr Val Gln Ile Ile Cys Thr
                        215
                                            220
Val Leu Arg Ile Pro Ser Ala Ala Gly Lys Arg Lys Ala Ile Ser Thr
                   230
                                        235
Cys Ala Ser His Phe Thr Val Val Leu Ile Phe Tyr Gly Ser Ile Leu
                                   250
               245
Ser Met Tyr Val Gln Leu Lys Lys Ser Tyr Ser Leu Asp Tyr Asp Gln
                                                    270
                                265
           260
Ala Leu Ala Val Val Tyr Ser Val Leu Thr Pro Phe Leu Asn Pro Phe
       275
                           280
                                               285
Ile Tyr Ser Leu Arg Asn Lys Glu Ile Lys Glu Ala Val Arg Arg Gln
                      295
   290
Leu Lys Arg Ile Gly Ile Leu Ala
                   310
<210> 2267
<211> 289
<212> PRT
<213> Homo sapien (8516051-8-7333-8874)
<220>
<221> VARIANT
```

<222> (1)...(289)

<223> Xaa = Any Amino Acid

<400> 2267

Tyr Thr Thr Ile Thr Ile Pro Lys Met Phe Phe Asn Leu Ala Ser Glu

```
55
Gln Lys Thr Thr Ser Leu Asp Gly Cys Leu Leu Gln Met Tyr Phe Phe
Tyr Ser Leu Gly Ile Thr Glu Val Cys Leu Leu Thr Thr Arg Ala Met
                                    90
Asp Arg Tyr Leu Ala Ile Cys Asn His Leu Cys Tyr Pro Thr Val Thr
                                                 · 110
            100
                                105
Thr Pro Xaa Leu Tyr Thr Gln Val Ile Leu Gly Cys Cys Ile Cys Gly
                            120
Phe Phe Thr Leu Leu Pro Glu Ile Ala Trp Ile Ser Thr Leu Pro Phe
                        135
Cys Gly Pro Asn Gln Ile His Asn Ile Phe Cys Asp Leu Asp Pro Ile
                   150
                                        155
Leu Asn Leu Ala Cys Val Asp Thr Gly Pro Val Val Leu Ile Lys Val
                                    170
               165
Val Asp Ile Val His Ala Val Glu Ile Ile Thr Ala Ile Met Leu Val
            180
                                185
Thr Leu Ala Tyr Val Gln Ile Ile Ala Val Ile Leu Arg Asn Cys Ser
                            200
                                                205
Ala Asp Gly Cys Gln Lys Ala Phe Ser Thr Tyr Ala Phe His Leu Ala
                       215
                                            220
Ile Phe Leu Ile Phe Phe Gly Ser Val Ala Leu Met Tyr Leu Leu Phe
                                        235
                    230
Ser Ala Lys Tyr Ser Phe Phe Trp Asp Thr Thr Ile Ser Leu Met Phe
                245
                                    250
Ala Val Leu Ser Pro Thr Pro Ile Ile Cys Ser Leu Arg Asn Lys Glu
                                265
Ile Lys Glu Ala Ile Lys Lys His Met Cys Gln Ser Met Ile Cys Thr
<210> 2268
<211> 166
<212> PRT
<213> Homo sapien (8516144-1-909-1747)
<220>
<221> VARIANT
<222> (1)...(166)
<223> Xaa = Any Amino Acid
<400> 2268
Met Tyr Thr Thr Leu Leu Met Ala Arg Leu Cys Leu Cys Ala Asp Asn
                -5
                                    10
Val Ile Pro His Ser Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ala
           20
                                25
Leu Ser Asp Thr Arg Val Asn Glu Xaa Val Ile Phe Ile Met Gly Gly
                            40
Leu Ile Leu Val Ile Pro Ser Ile Leu Ile Leu Gly Ser Tyr Ala Arg
                        55
Ile Val Ser Ser Ile Leu Lys Val Pro Ser Ser Lys Cys Ile Cys Lys
                                        75
Ala Phe Ser Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr
                                    90
Gly Thr Val Ile Gly Leu Tyr Leu Cys Ser Ser Ala Asn Ser Ser Thr
                                105
Leu Lys Asp Thr Val Met Ala Met Met Tyr Thr Val Val Thr Pro Met
```

125

120

Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Gly Ala

```
130
                       135
                                           140
Leu Ser Arg Val Ile His Gln Lys Lys Thr Phe Phe Ser Leu Xaa Xaa
                                       155
                   150
Xaa His Leu Glu Leu Leu
               165
<210> 2269
<211> 540
<212> PRT
<213> Homo sapien (8516144-24-10674-13726)
<220>
<221> VARIANT
<222> (1)...(540)
<223> Xaa = Any Amino Acid
<400> 2269
Met Asp Leu Gly Asn Ser Gly Asn Asp Ser Val Val Thr Lys Phe Val
                                   10
Leu Leu Gly Leu Thr Glu Thr Ala Ala Leu Gln Pro Ile Leu Phe Val
                               25
           20
Ile Phe Leu Leu Ala Tyr Val Thr Thr Ile Gly Gly Thr Leu Ser Ile
                           40
                                               45
      35
Leu Ala Ala Ile Leu Met Glu Thr Lys Leu His Ser Pro Met Tyr Phe
                                           60
                       55
Phe Leu Gly Asn Leu Ser Leu Pro Asp Val Gly Cys Val Ser Val Thr
                  70
                                       75
Val Pro Ala Met Leu Ser His Phe Ile Ser Asn Asp Arg Ser Ile Pro
                                   90
            85
Tyr Lys Ala Cys Leu Ser Glu Leu Phe Phe His Leu Leu Ala Gly
                               105
           100
Ala Asp Cys Phe Leu Leu Thr Ile Met Ala Tyr Asp Arg Tyr Leu Ala
                          120
       115
Ile Cys Gln Ser Leu Thr Tyr Ser Ser Arg Met Ser Trp Gly Ile Gln
                                           140
                       135
Gln Ala Leu Val Gly Met Ser Trp Val Phe Ser Phe Thr Asn Ala Leu
                                       155
                  150
Thr Gln Thr Val Ala Leu Ser Pro Leu Asn Phe Cys Gly Pro Asn Val
                                   170
               165
Ile Asn His Phe Tyr Cys Asp Leu Pro Gln Pro Phe Gln Leu Ser Cys
                               185
                                                   190
           180
Ser Ser Val His Leu Asn Gly Gln Leu Leu Phe Val Ala Ala Ala Phe
                                               205
       195
                           200
Met Gly Val Ala Pro Leu Val Leu Ile Thr Val Ser Tyr Ala His Val
                                           220
                       215
Ala Ala Ala Val Leu Arg Ile Arg Ser Ala Glu Gly Arg Lys Lys Ala
                                       235
                  230
Phe Ser Thr Cys Ser Ser His Leu Thr Val Val Gly Ile Phe Tyr Gly
                                  250
               245
Thr Gly Val Phe Ser Tyr Thr Arg Leu Gly Ser Val Glu Ser Ser Asp
           260
                               265
Lys Asp Lys Gly Ile Gly Ile Leu Asn Thr Val Ile Ser Pro Met Leu
       275
                           280
                                               285
Asn Pro Leu Ile Tyr Trp Thr Ser Leu Leu Asp Val Gly Cys Ile Ser
                       295
                                           300
His Cys Ser Ser Asp Ala Gly Val Ser Pro Gly Pro Pro Val Gln Ser
305
                   310
                                       315
Pro Tyr Ala Ala Cys Ser Ser Gln Leu Phe Phe Pro His Leu Leu Ala
                                   330
               325
Gly Val Asp Cys His Leu Leu Ile Ala Met Ala Tyr Asp Arg Tyr Leu
                               345
                                                   350
```

```
Ala Ile Cys Gln Leu Leu Thr Asn Ser Thr Arg Met Ser Cys Glu Val
                   360
       355
Gln Gly Ala Leu Val Gly Ile Cys Cys Thr Val Ser Phe Ile Asn Ala
                                          380
                       375
Leu Thr His Thr Val Ala Val Ser Ala Leu Asp Phe Cys Gly Pro Asn
                   390
                                      395
Val Val Asn His Phe Tyr Cys Asp Leu Pro Pro Leu Phe Gln Leu Ser
                            · 410
               405
Cys Ser Ser Ile His Leu Asn Gly Gln Leu Leu Val Gly Ala Thr
                                                  430
        420
                              425
Phe Ile Gly Val Ile Pro Met Ile Phe Ile Ser Val Ser Tyr Ala His
                           440
                                              445
Val Thr Ala Ala Ile Leu Gln Ile Arg Ser Ala Glu Gly Arg Lys Lys
                       455
                                          460
Ala Phe Ser Thr Cys Gly Ser His Leu Thr Val Val Xaa Ile Phe Tyr
                               475
                  470
Gly Thr Gly Phe Phe Ser Tyr Met Cys Leu Gly Ser Val Ser Ala Ser
                         490
              485
Asp Lys Asp Lys Gly Ile Gly Ile Leu Asn Thr Ile Leu Ser Pro Met
                              505
      500
Leu Asn Pro Val Ile Tyr Ser Leu Gln Asn Pro Asp Val Gln Gly Thr
                           520
Leu Lys Arg Val Leu Thr Gly Lys Arg Pro Pro Ala
<210> 2270
<211> 106
<212> PRT
<213> Homo sapien (8518017-12-460-1010)
<220>
<221> VARIANT
<222> (1)...(106)
<223> Xaa = Any Amino Acid
<400> 2270
Gln Leu Leu Ile Leu Ala Cys Ser Glu Ser Ser Leu Asn Ser Leu Tyr
               5
                                  10
Ser Phe Ile His Ser Phe Phe Cys Ser Phe Leu Pro Asn Ser Gly Tyr
                              25
Leu Val Ser Gln Thr Asp Leu Val Pro Asp Leu Arg Glu Phe Arg Ile
                           40
                                               45
Xaa Ser Arg Arg His Ile Arg Asn Trp Asn Val Met Gly Ala Met Ile
                                          60
                       55
Leu Asn Val Cys Glu Ala Thr Gly Asn Gly Val Ala Leu Pro Ile Ser 65 75 80
Lys Ala Ala Thr Pro Glu Ala Met Thr Gly Val Xaa Ser Glu His Asp
                                  90
Ile Ala Leu Leu Phe Trp Leu Leu Arg Leu
           100
                               105
<210> 2271
<211> 223
<212> PRT
<213> Homo sapien (8546599-5-2194-2867)
<220>
<221> VARIANT
<222> (1)...(223)
<223> Xaa = Any Amino Acid
```

```
<400> 2271
Val Arg His Pro Leu Arg Cys Gly Lys Xaa Glu Pro Ala Pro Leu Pro
               5
                                   10
1
Pro Leu Ala Leu Arg Asn Pro Ile Met Thr Ser Cys Phe Cys Gly Phe
                               25
                                                 30
Leu Val Leu Phe Phe Phe Phe Phe Leu Ser Pro Leu Asp Ala Gln
                           40
Leu His Asn Leu Ile Ala Leu Gln Met Thr Cys Phe Gln Asp Ala Glu
                                           60
                       55
Ile Pro Ser Phe Phe Trp Asp Pro Ser Gln Leu Pro His Leu Ala Cys
                   70
                                       75
Cys Asp Thr Phe Thr Asn Asn Ile Ile Met Tyr Leu Pro Ala Ala Ile
                                   90
Phe Gly Phe Leu Pro Ile Ser Gly Thr Leu Phe Ser Tyr Tyr Lys Ile
                                                  110
           100
                               105
Val Ser Ser Ile Leu Arg Val Ser Ser Ser Arg Gly Lys Tyr Lys Ala
                          120
                                              125
       115
Phe Ser Thr Cys Gly Ser His Leu Ser Val Val Cys Xaa Phe Tyr Gly
                                          140
                      135
Thr Gly Phe Gly Gly Tyr Leu Ser Ser Asp Val Ser Ser Ser Pro Arg
                                      155
                  150
Lys Ala Ala Val Ala Ser Val Met Tyr Thr Val Ile Thr Ser Met Leu
                                  170
                                                       175
               165
Asn Pro Phe Ile Tyr Ser Leu Arg Asn Arg Asp Ile Lys Gly Val Leu
                               185
                                                   190
           180
Arg Gln Pro His Gly Ser Thr Val Gln Phe Gln Tyr Leu Leu Ile Cys
                           200
                                               205
      195
Ser Ile Pro Phe Val Val Trp Val Lys Lys Gly Ser Lys Val Lys
   210
                       215
<210> 2272
<211> 120
<212> PRT
<213> Homo sapien (8546616-1-110163-110999)
<220>
<221> VARIANT
<222> (1)...(120)
<223> Xaa = Any Amino Acid
<400> 2272
Val Cys Ile Asn Ile Ser Xaa His His Xaa His Met Tyr Phe Xaa Leu
                                  10
Ser Tyr Gly Ser Phe Xaa Glu Leu Leu Val His Ser Ala Glu Leu Pro
                              25
Ser Arg Ile Trp Arg Leu Lys Ser Ser Xaa Ser Cys Lys Ile Leu Ser
                           40
Gly Tyr Ser Asn Glu Val Trp Phe His Cys Ile Phe Leu Cys Leu Leu
                       55
Ser Lys Arg Leu Lys Xaa Ala His Ser Asp Lys Cys Gly Gln Val Ser
                                      75
                   70
Leu Pro Leu His Pro Ser Leu Cys Leu Leu Leu Ser Leu Gly Asn Trp
                                  90
               85
Cys Gly Lys Ser Leu Cys Pro Gly Met Ala Thr Leu Leu Val Ser Arg
                              105
Leu Ile Gln Ser Ser Leu Cys Ser
<210> 2273
<211> 260
<212> PRT
```

```
<213> Homo sapien (8547576-2-9950-11981)
<220>
<221> VARIANT
<222> (1)...(260)
<223> Xaa = Any Amino Acid
<400> 2273
Val Leu Cys Val Ile Phe Cys Lys Xaa Asn His His Ile Ser Leu Leu
                                   10
Ser Phe Phe Glu Tyr Leu Met Thr Xaa Xaa Lys Lys Tyr Gly Ser Ile
                                25
           20
Cys Ser Thr Met Leu Val Ser Ile Arg Ile Lys Tyr Leu Glu Val Phe
                           40
Ala Glu Asn Leu Phe Gly Ala Ala Glu Ile Ile Pro Leu Met Trp Met
                        55
Val His Gly Cys Tyr Val Thr Val Cys Asn Tyr Met Thr Ile Val Asn
                                        75
                   70
Gln Tyr Arg Cys Ser His Leu Thr Gly Met Ala Trp Thr Glu Ser Phe
                                    90
Ile His Gly Thr Val Xaa Ile Leu Ser Pro Val Xaa Leu Pro Phe Tyr
                                105
Asp Pro Asn Val Ile Ala His Phe Met Cys Asp Leu Asn Thr Phe Leu
                            120
                                                125
Lys Leu Leu Cys Met Gly Thr Thr Asn Thr Ile Gly Phe Phe Val Ala
                                            140
                        135
Ala Asn Gly Gly Phe Asn Tyr Leu Leu Asn Ile Ile Phe Leu Met Val
                                        155
                   150
Ser Xaa Val Ala Ile Leu Cys Thr Leu Lys Thr His Ser Leu Glu Glu
                                    170
Arg Cys Xaa Ser Leu Ser Thr Cys Ile Ser His Thr Thr Met Val Ile
                               185
Leu Phe Phe Glu Phe Cys Ile Ser Val Tyr Leu Cys Pro Val Thr Leu
                                                205
                           200
Leu Pro Ile Asn Lys Ala Met Ala Val Phe His Thr Val Ile Asn Pro
                                            220
                        215
Met Leu Lys Pro Leu Val Tyr Thr Leu Arg Asn Ala Glu Val Lys Ser
                                       235
                  230
Ala Leu Arg Lys Val Trp Val Lys Arg Xaa Pro Glu Glu Arg Asn Asn
Leu Asn Ile Arg
            260
<210> 2274
<211> 328
<212> PRT
<213> Homo sapien (8567470-5-1-1337)
<220>
<221> VARIANT
<222> (1)...(328)
<223> Xaa = Any Amino Acid
<400> 2274
Tyr Thr Asp Pro Gln Asn Leu Thr Asp Val Phe Ile Phe Leu Leu
                                    10
Glu Leu Ser Glu Asp Pro Ala Leu Gln Leu Val Val Thr Gly Leu Cys
                                                    30
                                25
Leu Met Cys Leu Val Thr Val Leu Trp Asn Leu Leu Ser Ile Leu Ala
                           40
Val Ser Pro Asp Ser His Leu His Thr Pro Met His Phe Phe Leu Cys
```

```
60
                       55
Asn Leu Ser Leu Pro Asp Ile Gly Phe Thr Ser Thr Thr Val Pro Lys
                   70
                                      75
Met Ile Val Asp Ile Gln Ser His Ser Arg Val Ile Ser Tyr Ala Gly
                                   90
              85
Cys Leu Thr Gln Met Ser Leu Ser Ala Ile Phe Gly Gly Met Glu Glu
                               105
          100
Asn Met Leu Leu Ser Val Met Ala Tyr Asp Gln Phe Val Ala Ile Cys
                           120
                                              125
His Pro Leu Tyr His Ser Ala Ile Met Asn Pro Cys Phe Cys Gly Phe
                                          140
                       135
Leu Val Leu Leu Ser Phe Phe Phe Ser Val Phe Xaa His Ser Gln Leu
                                      155
                  150
Gln Asn Leu Ile Ala Leu Gln Ile Thr Cys Ser Lys Asp Val Glu Ile
                                  170
              165
Pro Asn Phe Phe Cys Asp Pro Ser Gln Leu Pro His Leu Ala Cys Cys
                               185
                                                  190
           180
Asp Thr Phe Thr Asn Asn Ile Ile Met Tyr Phe Pro Ala Ala Ile Phe
                                              205
                          200
Gly Phe Leu Pro Ile Ser Gly Thr Leu Phe Ser Tyr Tyr Lys Ile Val
                                          220
                      215
Ser Ser Ile Leu Arg Val Ser Ser Ser Gly Gly Ser Tyr Lys Ala Phe
                  230
                                       235
Ala Thr Cys Gly Ser His Leu Ser Val Val Cys Xaa Phe Tyr Gly Thr
               245
                                   250
                                                      255
Gly Val Gly Gly Tyr Leu Ser Ser Asp Val Ser Ser Ser Leu Arg Lys
                                                  270
           260
                               265
Arg Ala Val Ala Ser Val Met Tyr Thr Val Val Thr Pro Met Leu Asn
                           280
       275
Pro Leu Ile Tyr Ser Leu Arg Asn Arg Asp Ile Lys Gly Val Leu Trp
                      295
                                       300
Gln Pro Cys Ser Arg Thr Ala Ala Gln Ser Pro Ser Gln Tyr Leu His
                                 315
                  310
Leu Phe His Ser Phe Cys Arg Met
               325
<210> 2275
<211> 310
<212> PRT
<213> Homo sapien (8567878-9-2833-5012)
<220>
<221> VARIANT
<222> (1)...(310)
<223> Xaa = Any Amino Acid
<400> 2275
Met Ala Lys Thr Asn Asn Ser Glu Val Thr Glu Phe Ile Leu Leu Gly
               5
                                   10
Leu Thr Asp Asn Pro Glu Leu Gln Ala Leu Phe Trp Gly Ile Phe Leu
                               25
           20
Val Ile Asn Leu Ser Ser Val Met Gly Ser Leu Gly Leu Ile Met Leu
                           40
Ile His Ile Ser Pro Gln Leu His Thr Ala Met Tyr Phe Phe Leu Ser
                       55
                                           60
His Val Ala Phe Val Tyr Phe Cys Tyr Thr Ser Ser Ile Thr Pro Asn
                   70
                                      75
Ser Leu Val Asn Leu Leu Gln Glu Thr Lys Arg Ile Ser Leu Pro Thr
                                  90
               85
Cys Ala Ser Gln Leu His Cys Phe Ile Met Phe Val Val Cys Asp Met
                               105
```

```
Tyr Val Leu Ser Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                    120
Pro Leu Leu Tyr Ser Ile Ile Met Asn Arg Arg Val Cys Ile Gln Met
                       135
                                           140
Val Val Ser Thr Tyr Leu Tyr Gly Phe Ser Val Arg Leu Leu Gln Ala
                   150
                                       155
Ile Leu Thr Phe His Leu Ser Phe Xaa Asp Ser Asn Ile Ile Asn Asn
                                   170
Ser Tyr Cys Asp Asp Val Pro Leu Ala Cys Leu Pro Tyr His Lys Asn
                               185
His Tyr Lys Asp Val Lys Glu Leu Ile Leu Phe Thr Leu Ala Gly Phe
                                               205
                           200
Asn Thr Leu Phe Ser Leu Leu Ile Ile Leu Ile Ser Tyr Ile Ser Val
                       215
                                           220
Leu Ser Ala Ile Leu Arg Ile Asn Ser Ala Glu Ser Arg Gln Lys Ala
                                       235
                   230
Phe Ser Thr Cys Asp Ser His Leu Thr Ser Ile Ile Ile Phe Tyr Gly
                                   250
               245
Ile Ile Thr Phe Met Tyr Met Gln Xaa Lys Thr Asn Asn Ser Leu Asp
                               265
                                                    270
           260
Thr Asp Lys Ile Ala Ser Val Phe Cys Ile Val Lys Ile Pro Ser Ile
       275
                           280
Tyr Ser Leu Arg Asn His Glu Val Lys Asp Ala Leu Lys Met Ile Met
Glu Asn Leu Cys Leu Thr
<210> 2276
<211> 358
<212> PRT
<213> Homo sapien (8567902-2-5416-6914)
<220>
<221> VARIANT
<222> (1)...(358)
<223> Xaa = Any Amino Acid
<400> 2276
Val Ser Met Ser Phe Leu Ile Arg Ser Asp Ser Thr Leu His Thr Pro
                                   10
Met Cys Leu Phe Leu Ser His Leu Ser Phe Val Asp Leu Tyr Tyr Ala
           20
                               25
Thr Asn Ala Thr Pro Pro Met Leu Val Asn Phe Val Phe Ser Lys Arg
                            40
Lys Thr Val Ser Phe Ile Gly Cys Phe Ile Gln Phe His Leu Phe Ile
                       55
Ala Leu Val Ile Thr Asp Tyr His Met Leu Thr Val Met Val Tyr Asp
                    70
                                        75
His Tyr Met Ala Ile Cys Lys Pro Leu Leu Tyr Gly Ser Lys Met Ser
                                    90
Arg Cys Val Cys Leu Cys Leu Thr Ala Ala Pro Tyr Ile Tyr Gly Ser
          100
                                                    110
                                105
Ala Asn Gly Leu Val Gln Val Ile Leu Met Leu Cys Leu Phe Phe Cys
                                               125
                           120
Glu Pro His Glu Ile Asn His Phe Phe Phe Phe Gly Glu Asn Ala Leu
                       135
                                           140
Tyr Ala His Leu Ile Pro Leu Xaa Ile Phe Glu Trp Thr Val Gly Glu
                   150
                                       155
Glu Gly Arg Asn Asn Ile Asn Gly Glu Asn Thr Thr Gln Lys Val Tyr
                                   170
Thr Met Gly Glu Arg Asn Leu Leu Ile Gln Val Ser Ile Phe Leu Leu
```

```
180
                                 185
 Trp His Ile Arg Ser Xaa Leu Phe Ser Gln Tyr Glu Ala Ser Pro Arg
                           200
Ala Asp Ser Asp Val Lys Leu Glu Ile Asn His Phe Tyr Tyr Ala Glu
                        215
                                            220
Pro Pro Leu Leu Val Leu Ala Cys Leu Asp Thr Tyr Val Lys Glu Thr
                    230
                                        235
Ala Met Phe Met Val Ala Gly Ser Asn Leu Ile Cys Pro Leu Thr Ile
                                    250
                245
Ile Phe Ile Ser Tyr Thr Phe Ile Phe Thr Asp Ile Leu His Ile Cys
            260
                                265
Thr Ala Glu Gly Arg Tyr Asn Ala Phe Ser Thr Cys Gly Ser Leu Val
                            280
                                                285
Thr Ala Val Thr Val Phe Gln Gly Thr Leu Phe His Met Cys Leu Arg
                        295
                                            300
Pro Pro Ser Glu Ala Ser Val Glu Gln Gly Lys Ile Val Ala Ala Phe
                    310
                                        315
Tyr Ile Phe Val Ser Pro Thr Leu Asn Pro Leu Ile Tyr Arg Leu Arg
                                    330
Asn Lys Asn Val Lys Arg Thr Ile Arg Glu Val Ile Gln Lys Lys Leu
            340
                                345
Phe Ala Lys Xaa Gly Arg
       355
<210> 2277
<211> 305
<212> PRT
<213> Homo sapien (8567902-4-4497-6890)
<400> 2277
Met Ser Asn Thr Asn Gly Ser Ala Ile Thr Glu Phe Ile Leu Leu Gly
                                    10
Leu Thr Asp Cys Pro Glu Leu Gln Ser Leu Leu Phe Val Leu Phe Leu
            20
                                25
Val Val Tyr Leu Val Thr Leu Leu Gly Asn Leu Gly Met Ile Met Leu
                            40
Met Arg Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Thr
                        55
                                            60
Asn Leu Ala Phe Val Asp Leu Cys Tyr Thr Ser Asn Ala Thr Pro Gln
                                        75
Met Ser Thr Asn Ile Val Ser Glu Lys Thr Ile Ser Phe Ala Gly Cys
                                    90
Phe Thr Gln Cys Tyr Ile Phe Ile Ala Leu Leu Leu Thr Glu Phe Tyr
           100
                               105
Met Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Tyr Asp Pro
                            120
                                                125
Leu Arg Tyr Ser Val Lys Thr Ser Arg Arg Val Cys Ile Cys Leu Ala
                        135
                                            140
Thr Phe Pro Tyr Val Tyr Gly Phe Ser Asp Gly Leu Phe Gln Ala Ile
                   150
                                        155
Leu Thr Phe Arg Leu Thr Phe Cys Arg Ser Ser Val Ile Asn His Phe
                165
                                    170
Tyr Cys Ala Asp Pro Pro Leu Ile Lys Leu Ser Cys Ser Asp Thr Tyr
           180
                                185
                                                    190
Val Lys Glu His Ala Met Phe Ile Ser Ala Gly Phe Asn Leu Ser Ser
                            200
                                                205
Ser Leu Thr Ile Val Leu Val Ser Tyr Ala Phe Ile Leu Ala Ala Ile
                       215
                                            220
Leu Arg Ile Lys Ser Ala Glu Gly Arg His Lys Ala Phe Ser Thr Cys
                                       235
Gly Ser His Met Met Ala Val Thr Leu Phe Tyr Gly Thr Leu Phe Cys
```

```
245
                                    250
Met Tyr Ile Arg Pro Pro Thr Asp Lys Thr Val Glu Glu Ser Lys Ile
                                265
Ile Ala Val Phe Tyr Thr Phe Val Ser Pro Val Leu Asn Pro Leu Ile
                            280
Tyr Ser Leu Arg Asn Lys Asp Val Lys Gln Ala Leu Lys Asn Val Leu
                        295
Arg
305
<210> 2278
<211> 319
<212> PRT
<213> Homo sapien (8567954-21-10804-13693)
<220>
<221> VARIANT
<222> (1)...(319)
<223> Xaa = Any Amino Acid
<400> 2278
Met Gly Val His Asn Leu Phe Thr Val Thr Gln Phe Ile Leu Ile Gly
                                    10
Leu Ser Tyr Phe Ser Asn Glu His Tyr Leu Leu Phe Val Ala Leu Ala
Ile Ile Cys Gln Val Phe Leu Val Arg Ser Gly Asp Ile Leu Leu Ala
        35
                            40
Ile Gly Thr Val Ile Lys Leu His Thr Thr Met Tyr Tyr Phe Leu Ala
                        55
                                            60
Asn Val Ser Ile Leu Asp Ile Leu Cys Ser Ser Ala Thr Ile Pro Lys
                    70
                                        75
Met Pro Lys Ile Leu Xaa Thr Glu Asp His Ser Ile Ser Phe Val Arg
                85
                                    90
Xaa Ala Leu Gln Pro Tyr Phe Leu Val Ala Trp Ala Gly Lys Lys Cys
                                105
Phe Leu Thr Val Thr Ala Tyr Asp Trp Cys Val Val Thr Cys Phe Ser
                            120
                                                125
Leu Cys Tyr Ile Leu Ile Met Asn Lys Leu Val Ser Val Gln Leu Val
                        135
                                            140
Tyr Gly Thr Xaa Ala Ala Gly Phe Leu Asn Phe Leu Leu Leu His Val
                    150
                                        155
Val Ser Thr Leu Cys Leu Ser Phe Cys Lys Pro Asp Arg Val Asn Gln
                                    170
                165
Tyr Tyr Cys Asp Ile Ser Pro Met Gly Ala Leu Leu Cys Gln Ser Met
                                185
His Leu Ala Asn Met Leu Val Leu Val Glu Ser Val Ile Leu Gly Ile
                            200
Ser Ala Phe Leu Ala Ala Phe Asn Phe Tyr Ile Tyr Ile Ile Ser Thr
                        215
                                            220
Ile Leu Lys Ile Gln Cys Val Glu Trp Ser Ala Lys Cys Phe Ser Thr
                    230
                                        235
Cys Thr Ser His Leu Leu Thr Val Cys Leu Phe Tyr Gly Ile Leu Thr
                245
                                    250
Phe Thr Tyr Ile Tyr Ser Phe Ser Ser His Thr His Met Ser Lys Ala
            260
                                265
Ser Pro Asp Leu Ala Thr Asp Arg Leu Ile Ser Met Leu Tyr Arg Val
                            280
                                                285
Ile Thr Leu Met Phe Asn Phe Ile Thr Asp Asn Leu Arg Asn Thr Glu
                        295
                                            300
Val Lys Gly Ala Ser Glu Arg Phe Tyr Val Ile Glu His Val Tyr
```

```
<210> 2279
<211> 307
<212> PRT
<213> Homo sapien (8567954-21-4824-8043)
Met Asn His Ser Val Val Thr Glu Phe Ile Ile Leu Gly Leu Thr Lys
                                    10
Lys Pro Glu Leu Gln Gly Ile Ile Phe Leu Phe Phe Leu Ile Val Tyr
                                25
           20
Leu Val Ala Phe Leu Gly Asn Met Leu Ile Ile Ile Ala Lys Ile Tyr
       35
                            40
Asn Asn Thr Leu His Thr Pro Met Tyr Val Phe Leu Leu Thr Leu Ala
                       55
                                            60
Val Val Asp Ile Ile Cys Thr Thr Ser Ile Ile Pro Lys Met Leu Gly
                                        75
                    70
Thr Met Leu Thr Ser Glu Asn Thr Ile Ser Tyr Ala Gly Cys Met Ser
                                    90
               85
Gln Leu Phe Leu Phe Thr Trp Ser Leu Gly Ala Glu Met Val Leu Phe
                                105
                                                    110
            100
Thr Thr Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe Pro Leu His
                                                125
                            120
Tyr Ser Thr Val Met Asn His His Met Cys Val Ala Leu Leu Ser Met
                                            140
                       135
Val Met Ala Ile Ala Val Thr Asn Ser Trp Val His Thr Ala Leu Ile
                                        155
                    150
Met Arg Leu Thr Phe Cys Gly Pro Asn Thr Ile Asp His Phe Phe Cys
                165
                                    170
Glu Ile Pro Pro Leu Leu Ala Leu Ser Cys Ser Pro Val Arg Ile Asn
                               185
                                                    190
            180
Glu Val Met Val Tyr Val Ala Asp Ile Thr Leu Ala Ile Gly Asp Phe
        195
                            200
                                                205
Ile Leu Thr Cys Ile Ser Tyr Gly Phe Ile Ile Val Ala Ile Leu Arg
                                           220
                       215
Ile Arg Thr Val Glu Gly Lys Arg Lys Ala Phe Ser Thr Cys Ser Ser
                                        235
                   230
His Leu Thr Val Val Thr Leu Tyr Tyr Ser Pro Val Ile Tyr Thr Tyr
                                   250
                245
Ile Arg Pro Ala Ser Ser Tyr Thr Phe Glu Arg Asp Lys Val Val Ala
                                                    270
            260
                               265
Ala Leu Tyr Thr Leu Val Thr Pro Thr Leu Asn Pro Met Val Tyr Ser
       275
                           280
Phe Gln Asn Arg Glu Met Gln Ala Gly Ile Arg Lys Val Phe Ala Phe
                        295
                                            300
Leu Lys His
305
<210> 2280
<211> 104
<212> PRT
<213> Homo sapien (8568141-22-12851-13662)
<220>
<221> VARIANT
<222> (1)...(104)
<223> Xaa = Any Amino Acid
Leu Pro Pro Asn Ile Leu Cys Val Ile Ile Ser Tyr Ser Arg His Phe
                 5
                                    10
```

```
Ser Lys Leu Leu Lys Ile Pro Asn Ile Arg Thr Gln Ile Gln Lys Phe
                               25
Ser His Ile Ser Xaa Asn Leu Lys Lys Val Ser Val Leu Arg Leu Thr
Trp Thr Arg Tyr Pro Ser Xaa Met Leu Pro Xaa Tyr Pro Ala Pro Thr
                                            60
Leu Thr Lys His Ile Pro Cys Gly Leu Val Thr Cys Leu Leu Gln Pro
                                       75
Arg Met Ser Cys Trp Arg Ala Arg Asn Ala Pro Ser Thr Cys Leu Ala
                                   90
Leu Thr Ala Lys His Ile Ser Ala
            100
<210> 2281
<211> 333
<212> PRT
<213> Homo sapien (8568143-10-1394-2684)
<220>
<221> VARIANT
<222> (1)...(333)
<223> Xaa = Any Amino Acid
<400> 2281
Met Gly Pro Lys Asn Leu Thr Arg Val Leu Glu Phe Phe Leu Leu His
                5
Phe Leu Asp Asp Leu Glu Leu Gln Pro Phe Leu Ser Gly Cys Pro Xaa
                                25
            20
Thr Met His Leu Val Thr Val Leu Ala Asn Leu Leu Thr Ser Phe Xaa
                                                45
                            40
Leu Ser Ala Leu Pro His Leu His Asn Pro Met Asn Phe Asn Leu Ser
                        55
                                            60
Leu Ala Asp Ile Gly Phe Thr Pro Ala Thr Ile Ser Lys Ile Thr Val
                    70
                                        75
Asp Leu Gln Thr His Ser Arg Ile Ile Leu Tyr Met Ser Cys Leu Lys
                                   90
                85
Xaa Met Ser Phe Lys Ile Ile Phe Gly Cys Leu His Asn Leu Leu Ile
                               105
           100
Thr Val Met Ala Tyr Asp Pro Phe Val Ala Thr Cys His Leu Leu Tyr
                                                125
                           120
Tyr Thr Val Ile Arg Asn Pro His Leu Cys Gly Leu Leu Leu Val
                                            140
                        135
Ser Leu Phe Ser Leu Ser Phe Phe Phe Leu Ile Ser Leu Leu Glu Thr
                    150
                                        155
Gln Leu Tyr Ser Leu Met Val Ser Gln Val Leu Cys Met Gln Asp Val
                                    170
Asp Ile Pro His Phe Phe Cys Asp Pro Ser Gln Phe Leu His Leu Ser
            180
                                185
Cys Ser Asp Thr Ala Thr Asn Asn Thr Leu Met His Phe Ile Gly Ala
                                                205
                           200
Ile Phe Cys Gly Pro Phe Ser Gly Ile Leu Tyr Cys Tyr Thr Gln Ile
                        215
                                            220
Met Phe Ser Ile Leu Ile Thr Leu Xaa Asn Val Gly Ser Ile Lys Gln
                                        235
                    230
Thr Phe Ser Thr His Arg Ser His Leu Ser Val Val Cys Leu Phe Tyr
                                    250
                245
Gly Thr Gly Leu Gly Val Tyr Leu Ser Leu Ala Gly Ser Pro Ser Pro
                                                    270
                               265
Arg Thr Gly Val Val Ala Ser Met Val Tyr Thr Thr Val Thr Leu Met
                                                285
                            280
Leu Asn Pro Val Ile His Ser Leu Arg Asn Arg Asp Ile Lys Asn Thr
```

```
300
                        295
   290
Trp Trp Trp Leu Leu Ser Ile Thr Ala Trp Tyr Gln Tyr Leu Cys Tyr
                310
                                      315
Pro Leu Trp Ser Val Val Arg Lys Asn Ser Lys Leu Lys
               325
<210> 2282
<211> 157
<212> PRT
<213> Homo sapien (8568247-23-1134-2556)
<220>
<221> VARIANT
<222> (1)...(157)
<223> Xaa = Any Amino Acid
<400> 2282
Phe Leu Lys Met Arg Leu Lys Glu Leu Met Xaa Asp Arg Thr Ile Met
                                   10
Asp Tyr Trp Arg Glu Gly Arg His Ile Xaa Gly Met Phe Leu Ala Phe
                               25
       20
Pro Phe Gly Xaa Pro Ile Pro Lys Leu Phe Leu Trp Val Ser Ile Arg
Asp Met Ala Val Thr Trp Met Asp His Arg His Glu Ser Cys Ser Pro
                                           60
                        55
Phe Leu Pro Lys Leu Gln Pro Phe Ser Ser Cys His Val Ser Glu Leu
                   70
                                        75
Cys Thr Cys Leu Asp Thr Phe Thr Lys Ser Tyr Ile Thr Xaa Ile Arg
                                   90
Gly Leu Lys Gly Phe Asn His Leu Cys Phe Leu Leu His Tyr Cys His
                              105
                                                   110
           100
Cys Ala Arg Ala Gln Val Ser Xaa Asn Ala Pro Trp Ser Leu Ala Gln
                          120
                                               125
      115
Arg Cys Gln Pro Asn Met Leu Ile Arg Xaa Leu Phe Cys Leu Lys Leu
                                          140
                       135
Val Val His Asp Arg Leu Xaa His Val Leu Ser Leu Leu
                   150
<210> 2283
<211> 91
<212> PRT
<213> Homo sapien (8568259-4-1499-2114)
<220>
<221> VARIANT
<222> (1)...(91)
<223> Xaa = Any Amino Acid
<400> 2283
Gln Glu Ile Ser Ala Ala Arg Glu Arg Lys Ala Thr Lys Ile Leu Gly
                5
                                    10
Ile Ile Leu Gly Ala Phe Ile Ile Cys Trp Leu Pro Phe Phe Val Val
           20
                               25
Ser Leu Val Leu Pro Ile Cys Arg Asp Ser Cys Trp Ile His Pro Ala
                           40
Leu Phe Asp Phe Phe Thr Trp Leu Gly Tyr Leu Asn Ser Leu Ile Asn
Pro Ile Ile Tyr Thr Val Phe Asn Glu Glu Phe Arg Gln Ala Phe Gln
                   70
Lys Ile Val Pro Phe Arg Lys Ala Ser Xaa Ser
               85
```

```
<210> 2284
<211> 320
<212> PRT
<213> Homo sapien (8569904-8-5520-7957)
Met Asp Ser Pro Ser Asn Ala Thr Val Pro Cys Gly Phe Leu Leu Gln
                                    10
Gly Phe Ser Glu Phe Pro His Leu Arg Pro Val Leu Phe Leu Leu
            20
                               25
Leu Gly Val His Leu Ala Thr Leu Gly Gly Asn Leu Leu Ile Leu Val
                            40
Ala Val Ala Ser Met Pro Ser Arg Gln Pro Met Leu Leu Phe Leu Cys
Gln Leu Ser Ala Ile Glu Leu Cys Tyr Thr Leu Val Val Val Pro Arg
                    70
                                        75
Ser Leu Val Asp Leu Ser Ser Arg Gly His Arg Arg Gly Ser Pro Ile
                85
                                    90
Ser Phe Leu Ser Cys Ala Phe Gln Met Gln Met Phe Val Ala Leu Gly
            100
                                105
                                                    110
Gly Ala Glu Cys Phe Leu Leu Ala Ala Met Ala Asn Asp Arg Tyr Val
                            120
                                                125
Ala Ile Cys His Pro Leu Arg Tyr Arg Ala Val Val Thr Pro Gly Leu
                        135
Cys Ala Arg Leu Val Ser Gly Cys Cys Leu Arg Gly Leu Ala Val Ser
145
                    150
                                        155
Leu Gly Leu Thr Val Leu Ile Phe His Leu Pro Phe Cys Gly Ser Arg
                                    170
                165
Leu Leu His Phe Phe Cys Asp Ile Thr Ala Leu Leu His Leu Ala
                                185
Cys Thr Arg Thr Thr Pro His Glu Leu Pro Leu Gly Ala Cys Leu
                           200
                                                205
Val Leu Leu Leu Pro Ser Val Leu Ile Leu Ala Ser Tyr Gly Ala
                       215
                                            220
Ile Ala Ala Ala Leu Val Arg Leu Arg Cys Pro Lys Gly Arg Gly Lys
                    230
                                       235
Ala Ala Ser Thr Cys Ala Leu His Leu Ala Val Thr Phe Leu His Tyr
                245
                                    250
Gly Cys Ala Thr Phe Met Tyr Val Arg Pro Arg Ala Ser Tyr Ser Pro
            260
                                265
                                                   270
Arg Leu Asp Arg Thr Leu Ala Leu Val Tyr Thr Asn Val Thr Pro Leu
       275
                           280
                                               285
Leu Cys Pro Leu Ile Tyr Ser Leu Arg Asn Arg Glu Ile Thr Ala Ala
                                           300
                       295
Leu Ser Arg Val Leu Gly Arg Arg Pro Gly Gln Ala Pro Gly Gly
                   310
                                       315
<210> 2285
<211> 130
<212> PRT
<213> Homo sapien (8569934-12-21632-22280)
<220>
<221> VARIANT
<222> (1)...(130)
<223> Xaa = Any Amino Acid
<400> 2285
Lys Val Cys Leu Phe Gln Ala Leu Met Cys Trp Leu Ser Leu Xaa Gln
1
                                    10
```

```
Gln Pro Phe Thr Gln Ser Ala Ser Thr Leu Leu Leu Pro Leu Cys Ile
                                25
Pro Arg Gln Ala Pro Gln Cys Pro Gly Asp Leu Arg Thr Ala Leu Arg
                            40
Ala Val Met Cys Thr Arg Gly Cys Val Phe Xaa Ala Trp Glu Trp Val
Ala Ser Tyr Ile His Leu Ile Pro Leu Cys Ile Pro Val Arg Ser Ala
Tyr Asn Leu Gly Arg Val Leu Asn Gly Val Lys Trp Cys Ser Xaa Gly
                                    90
Gln Gln Val Glu Phe Cys Ser Cys Lys Ala Lys Leu Met Leu Leu Ala
                               105
Ser Val Asp Val Val Leu Val Ser Thr Gln Pro Xaa Asn Pro Arg Pro
                            120
His Glu
    130
<210> 2286
<211> 318
<212> PRT
<213> Homo sapien (8569993-13-6018-8083)
<221> VARIANT
<222> (1)...(318)
<223> Xaa = Any Amino Acid
<400> 2286
Ile Ser Thr Met Ser Val Phe Lys Ser Ser Ala Xaa Asn Pro Arg Phe
                                    10
Leu Gln Thr Gly Leu Ser Gly Leu Glu Ser Arg Tyr Asp Leu Ile Ser
Leu Pro Ile Phe Leu Val Tyr Ala Thr Ser Ile Ala Gly Asn Ile Ser
                                                45
                            40
Ile Leu Phe Ile Ile Arg Thr Glu Ser Ser Leu His Gln Pro Met Tyr
                       55
Tyr Phe Leu Ser Met Leu Ala Phe Thr Asp Leu Gly Leu Ser Asn Thr
                                        75
                    70
Thr Leu Pro Thr Met Phe Ser Val Phe Trp Phe His Ala Arg Glu Ile
                                    90
               85
Ser Phe Asn Ala Cys Leu Val Gln Met Tyr Phe Ile His Val Phe Ser
                                105
                                                    110
Ile Ile Glu Ser Ala Val Leu Leu Ala Met Ala Phe Asp Cys Phe Ile
                                                125
                            120
Ala Ile Xaa Glu Pro Leu Arg Tyr Ala Ala Ile Leu Thr Asn Asp Val
                                            140
                        135
Ile Ile Gly Ile Gly Leu Ala Ile Ala Gly Arg Ala Leu Ala Leu Val
                    150
                                        155
Phe Pro Ala Ser Phe Leu Leu Lys Arg Leu Gln Tyr His Asp Val Asn
                                    170
               165
Ile Leu Ser Tyr Leu Phe Cys Leu His Gln Asp Leu Ile Lys Thr Thr
            180
                                185
                                                    190
Val Ser Asn Cys Arg Val Ser Ser Ile Tyr Gly Leu Met Val Val Ile
                            200
                                                205
        195
Cys Ser Met Gly Leu Asp Ser Val Leu Leu Leu Leu Ser Tyr Val Leu
                        215
                                            220
Ile Leu Gly Thr Ala Leu Ser Ile Ala Ser Lys Ala Glu Arg Val Arg
                   230
                                       235
Ala Leu Asn Thr Cys Ile Ser His Ile Cys Ala Val Leu Thr Phe Tyr
                                    250
                245
Thr Pro Met Ile Gly Leu Ser Met Ile His Arg Tyr Gly Gln Asn Ala
```

```
260
                                265
Pro His Ile Val His Val Leu Met Ala Asn Val Tyr Leu Met Gly Pro
                           280
                                                285
Pro Leu Met Asn Pro Val Phe Tyr Ser Val Lys Thr Arg Gln Ile Arg
                       295
Asp Arg Ile Phe Gln Ile Lys Phe Arg Asn Met Lys Cys Arg
                    310
<210> 2287
<211> 235
<212> PRT
<213> Homo sapien (8570235-22-3034-4808)
<220>
<221> VARIANT
<222> (1)...(235)
<223> Xaa = Any Amino Acid
<400> 2287
Met Leu Phe Ile Ser Gln Trp Gly Glu Arg Xaa Arg Val Arg Arg Asn
                5
                                    10
Val Gln Leu Met Thr Ala Phe Ile Leu Met Asp Leu Pro His Val Pro
            20
                                25
Ala Leu Asp Ala Pro Leu Phe Gly Val Phe Leu Val Val Tyr Val Leu
                            40
Thr Val Leu Gly Asn Leu Leu Ile Leu Leu Val Ile Arg Val Tyr Ser
His Leu His Thr Pro Lys Tyr Tyr Phe Leu Thr Asn Leu Ser Phe Ile
                    70
                                        75
Asp Leu Trp Phe Phe Thr Val Met Val Pro Lys Met Pro Arg Thr Leu
                85
                                   90
Leu Ser Leu Cys Gly Lys Ala Val Ser Phe His Ser Cys Met Thr Gln
                               105
           100
Leu Tyr Phe Phe Tyr Phe Leu Gly Ser Thr Glu Cys Leu Leu Tyr Thr
                            120
                                                125
Val Met Ser Tyr Asp Arg Tyr Arg Gly Asn Thr Gln His Phe Pro Gly
                        135
Ser Glu Asn Leu Pro Thr Lys Xaa Ala Lys Cys Xaa Trp Pro Gly Gly
                   150
                                       155
His Thr Gly Xaa Pro Leu Ile Ile Leu Ala Asp Leu Ser Gly Xaa Leu
                                   170
               165
Arg Val Asp Ser Ser Xaa Trp Ala Ile Gln Asn Xaa Xaa Tyr Asn Leu
           180
                               185
Val Ile Gln Val Lys Phe Ile Thr Cys Ile Gly Leu Ser Ile Lys His
                            200
Tyr Ser Lys Gln Leu Ala Gln Leu Xaa Phe Phe His Arg Leu Ser Lys
                       215
Thr Phe Leu Asn Ser Gln Leu Asp Phe Tyr Leu
                    230
<210> 2288
<211> 325
<212> PRT
<213> Homo sapien (8570522-1-103735-108559)
<220>
<221> VARIANT
<222> (1)...(325)
<223> Xaa = Any Amino Acid
```

<400> 2288

```
Met Lys Ile Asn Gln Thr Ile Leu Lys Glu Phe Ile Leu Val Gly Phe
                                    10
Ser Val Tyr Pro His Val Gln Thr Phe Leu Phe Val Val Phe Phe Cys
                                25
            20
Leu Tyr Leu Leu Thr Leu Ala Gly Asn Leu Thr Ile Met Gly Leu Thr
                            40
Xaa Val Asp Arg Ser Leu His Thr Pro Met Tyr Leu Phe Leu Ser Ala
                        55
Leu Ser Phe Ser Glu Thr Cys Tyr Thr Leu Thr Ile Val Pro Lys Met
                    70
                                        75
Leu Glu Asp Leu Leu Ala Lys Asp Arg Ser Ile Ser Val Thr Gly Cys
                                    90
                85
Ser Leu Gln Met Cys Phe Phe Leu Gly Leu Gly Gly Thr Asn Cys Ile
            100
                               105
Ile Leu Thr Leu Met Gly Tyr Asp Arg Phe Leu Ala Ile Cys Asn Pro
                           120
                                               125
Leu Arg Tyr Pro Leu Leu Met Thr Asn Ile Val Cys Gly Gln Leu Val
                       135
                                            140
Ala Ser Ala Cys Thr Ala Gly Phe Phe Ile Ser Leu Thr Glu Thr Ala
                                        155
                   150
Leu Ile Phe Arg Asp Ser Phe Cys Arg Pro Asn Leu Val Lys His Phe
                                    170
                165
Phe Cys His Met Leu Ala Val Ile Arg Leu Ser Cys Ile Asp Ser Asn
                                185
                                                    190
            1.80
His Thr Glu Phe Ile Ile Thr Leu Ile Ser Val Ser Gly Leu Leu Gly
                                                205
                            200
        195
Thr Leu Leu Leu Ile Ile Leu Thr Asp Val Phe Ile Ile Ser Thr Val
                        215
Leu Arg Ile Pro Ser Ala Glu Gly Lys Gln Lys Ala Phe Thr Thr Cys
                    230
                                        235
Ala Ser His Leu Thr Val Val Ile Ile His Phe Gly Phe Ala Ser Ile
                                                        255
                                    250
                245
Val Tyr Leu Lys Pro Glu Ala Ser Gly Asp Asp Thr Leu Ile Ala Val
                                                    270
            260
                                265
Pro Tyr Thr Val Ile Thr Pro Phe Leu Ser Pro Ile Ile Phe Ser Leu
                                                285
        275
                           280
Arg Asn Lys Asp Met Lys Asn Ala Phe Arg Arg Met Met Gly Asn Thr
                       295
                                           300
Val Ala Leu Lys Lys Xaa Ile Leu Gly Cys Cys Cys Leu Phe Glu Glu
                    310
                                        315
Gly Leu Asn Val Pro
                325
<210> 2289
<211> 151
<212> PRT
<213> Homo sapien (8570523-1-20584-21124)
<220>
<221> VARIANT
<222> (1)...(151)
<223> Xaa = Any Amino Acid
<400> 2289
Cys Val Ser Xaa Gln Arg Ser Pro His Phe Leu Cys Ser Gly Asp Ser
                                    10
1
Val Phe Cys Leu Val His Ser Val Gly Cys Cys Thr Leu Leu Leu Ser
            20
                                25
Gln Ser Leu Arg Leu Leu Ser Val Phe Leu Leu Ser Ser Cys Ala Ala
                            40
Ser Trp Lys Lys Val His Ser Met Asn Leu Tyr Thr Pro Phe Cys Leu
```

```
55
                                            60
Ser Lys Trp Xaa Asn His Val Asn Asn Ala Phe Asn Leu Pro Ser Trp
                   70
                                        75
Lys Lys Ser Lys Ser Val Val Thr Met Phe Xaa Gly Pro Ala Met Ile
                                    90
               85
Thr Tyr Leu Arg Ser Asp Ser Xaa Tyr Asn Pro Thr Val Gly Lys Gln
           100
                               105
Leu Val Leu Phe Tyr Ser Ile Val Ser Ala Phe Ile Lys Pro Ile Ile
                           120
                                                125
Ser Ser Leu Arg Asn Lys Asp Val Lys Gly Ala Ser Trp Lys Val Leu
                       135
Arg Val Lys Gly Thr Ala Gln
<210> 2290
<211> 96
<212> PRT
<213> Homo sapien (8570526-1-82280-82723)
<220>
<221> VARIANT
<222> (1)...(96)
<223> Xaa = Any Amino Acid
<400> 2290
Ile Val Val Asp Tyr Leu Ile Ile Lys Ser Ser Ile Phe Pro Pro Ala
Asn Ser Asn Leu Phe Lys Leu Ile Arg Lys Ser Ile Pro Ile Leu Ala
                                25
Cys Xaa Arg Val Met Met Asp Leu Gly Xaa Thr Gln Asn Val Ser Thr
Ser Lys Xaa Gly Cys Val Asp Lys Glu Tyr Asn Cys Phe Ile Pro Phe
                        55
Leu Ile Ala Trp His Leu Xaa His Arg Glu Xaa Arg Ile Ile Xaa Asp
                   70
                                        75
Arg Ile Ser Ile Leu Val Xaa Lys Ala Leu Trp Met Lys Asn Lys Gly
                                    90
<210> 2291
<211> 162
<212> PRT
<213> Homo sapien (8575931-7-5387-5879)
<220>
<221> VARIANT
<222> (1)...(162)
<223> Xaa = Any Amino Acid
<400> 2291
Leu Leu Ile Ile Pro Ala Ile Ala Thr Asp Thr Arg Leu Ser Val Leu
                                    10
Val Arg Phe Phe Leu Ala Asn Leu Ala Phe Val Val Thr Cys Phe Thr
                                25
            20
Ser Thr Thr Ile Pro Lys Met Leu Ala Cys Lys Glu Ile Pro Cys Val
                            40
Met Ser Gly Cys Lys Gly Ile Pro Tyr Ala Gly Cys Leu Thr Gln Met
                        55
Leu Phe Phe Ile Trp Leu Gly Ile His Ser Phe Leu Leu Thr Ala Met
                                        75
                    70
Ala Asn Glu His Cys Val Ala Ile Cys His Ser Leu Asn Ser Ile Arg
                                    90
```

```
Ser Val Thr Pro Xaa Leu Cys Gly Leu Leu Val Val Ala Ser Trp Thr
                               105
            100
Phe Ala Phe Arg Asn Ala Leu Thr His Pro Val Leu Leu Thr Arg Leu
                           120
                                                125
       115
Ser Leu Cys Thr Tyr Glu Trp Val Ser His Val Phe Cys Asn Leu Ser
                                            140
                       135
Gln Leu Leu Lys Leu Ala Cys Ser Asp Ala Thr Leu Asn Asn Val Thr
                   150
                                        155
Val Gln
<210> 2292
<211> 264
<212> PRT
<213> Homo sapien (8648586-17-1126-4850)
<220>
<221> VARIANT
<222> (1)...(264)
<223> Xaa = Any Amino Acid
<400> 2292
Ala Cys Val Thr Phe Leu Val Glu Val Thr Val Met Pro Phe Ser Thr
                                   10
Val Arg Phe Val Lys Ser Cys Trp Tyr Phe Gly Asp Ser Ser Cys Lys
                                                   30
                               25
Phe Asn Thr Trp Phe Asp Thr Ser Phe Cys Phe Ala Ser Leu Phe His
                                               45
                           40
Xaa Gly Cys Ile Ser Val Asp Arg Tyr Met Leu Val Ser Asp Leu Leu
                       55
Thr Tyr Pro Thr Lys Phe Thr Val Ser Val Leu Gly Ile Cys Met Val
                                        75
                   70
Leu Cys Trp Phe Leu Phe Cys Pro Tyr Ser Phe Ser Ile Phe Asn Thr
                                    90
Gly Ala Asn Glu Glu Gly Ile Glu Glu Leu Val Val Ala Leu Thr Cys
                               105
Val Gly Gly Cys Gln Ala Pro Leu Asn Gln Asn Trp Val Leu Leu Cys
                           120
                                                125
       115
Phe Leu Leu Phe Phe Ile Pro Asn Val Ala Met Val Phe Ile Tyr Ser
                                            140
                       135
Lys Ile Phe Leu Val Ala Lys His Gln Ala Arg Lys Ile Glu Ser Thr
                   150
                                        155
Ala Ser Gln Ala Gln Ser Ser Ser Glu Ser Tyr Lys Glu Arg Val Ala
                                   170
               165
Lys Arg Glu Arg Lys Ala Ala Lys Thr Leu Gly Ile Ala Met Ala Ala
           180
                               185
                                                    190
Phe Leu Val Ser Trp Leu Pro Tyr Leu Val Asp Ala Val Ile Asp Ala
                                                205
                           200
Tyr Met Asn Phe Ile Thr Pro Pro Tyr Val Tyr Glu Ile Leu Val Trp
   210 --
                       215
                                            220
Cys Val Tyr Tyr Asn Ser Ala Met Asn Pro Leu Ile Tyr Ala Phe Phe
                   230
                                        235
Tyr Gln Trp Phe Gly Lys Ala Ile Lys Leu Ile Val Ser Gly Lys Val
                                    250
               245
Leu Arg Thr Asp Ser Ser Thr Thr
            260
<210> 2293
<211> 126
<212> PRT
<213> Homo sapien (8648858-36-1-1206)
```

```
<220>
<221> VARIANT
<222> (1)...(126)
<223> Xaa = Any Amino Acid
Leu Cys Met Leu Cys Trp Gln Trp Pro Ala Val Met Thr Asp Arg Thr
                5
Ile Ala Thr Cys Lys Ser Arg His Phe Leu Phe Leu Ile Leu Val Leu
                                25
           20
Thr Cys Ser Leu Ile Pro Ala Xaa Ala Trp Phe Thr Tyr Phe Phe Phe
                            40
                                                45
Asn Ser Lys Ser Cys Val Val Leu Phe Gln His Ile His Phe Cys Leu
                       55
                                            60
Leu Xaa Ile Pro Ser Asn Phe Tyr Cys Leu Xaa Thr Thr Ala Tyr Leu
                                       75
                   70
Lys Xaa Leu Leu Asn Met Xaa Leu Lys His Xaa Ile Lys Xaa Thr Tyr
                                   90
               85
Ile Val Phe Leu Ala Val Arg Ile Leu Xaa Ala Phe Leu Ile Leu Ile
                               105
          100
Cys Ile Met Asn Leu Gln Leu Arg Gln Cys Ala Thr His Phe
                            120
<210> 2294
<211> 183
<212> PRT
<213> Homo sapien (8649180-1-4193-6564)
<220>
<221> VARIANT
<222> (1)...(183)
<223> Xaa = Any Amino Acid
<400> 2294
Val Ile Met His Lys Lys Glu Cys Xaa Lys Lys Thr His Asn Ile Val
Phe Leu Leu Met Val Trp Glu Phe Phe Tyr Lys Phe Leu Val Phe Phe
                                25
Phe Phe Ser Leu His Xaa Cys Val Ser Ser Ile Ile Met Ser Val Tyr
                            40
Tyr Xaa Lys Ile Asn Ile Phe Ile Xaa Ile Glu Thr Lys Leu Leu Phe
                        55
His Ile Ser Arg Xaa Asp Arg Met Ile Arg Cys Ser Phe Gln Lys Asn
                                        75
Tyr Leu Leu Asn His Asn Gly Leu Met Cys Arg Ser Lys Cys Gln Leu
                                    90
Val Tyr Gln Thr Val Ser Asn Ser Leu Asn Tyr Phe Tyr Ile Thr Pro
                                                    110
                                105
Ile Xaa Leu Phe Gln Ile Val Val Tyr Lys Lys Tyr Lys Phe Leu His
                           120
Cys Ile Val Leu Asp Val Pro Ala Tyr Ile Asn Ile Leu Gly Cys Ile
                                            140
                        135
Val Ser Phe Leu His Val Ile Cys Asn Val Xaa Leu Tyr Val Ile Asn
                   150
                                        155
Lys Thr Xaa Asn Xaa Tyr Lys Ser Arg Phe Ser Thr Cys Leu Ser His
                                    170
               165
Ser Asp Ile Thr Asp Leu Phe
            180
```

<210> 2295

```
<211> 157
 <212> PRT
 <213> Homo sapien (902315-1-1-472)
 <400> 2295
 Ile Cys His Pro Leu Gln Tyr Thr Ile Leu Met Asn Pro Glu Leu Cys
                                     10
 Val Phe Met Thr Val Ala Ser Trp Thr Leu Gly Ser Leu Asp Gly Ile
                                 25
 Ile Val Leu Ala Ala Val Leu Ser Phe Ser Tyr Cys Ser Ser Leu Glu
                             40
                                                 45
 Ile His His Phe Phe Cys Asp Val Ala Ala Leu Leu Pro Leu Ser Cys
                         55
                                             60
 Thr Glu Thr Ser Ala Phe Glu Arg Leu Leu Val Ile Cys Cys Val Val
                     70
 Met Leu Ile Phe Pro Val Ser Val Ile Ile Leu Ser Tyr Ser His Val
                 85
                                     90
 Leu Arg Ala Val Ile His Met Gly Ser Gly Glu Ser Arg Arg Lys Ala
                                 105
 Phe Thr Thr Cys Ser Ser His Pro Ser Val Val Gly Leu Tyr Tyr Gly
                             120
                                                 125
 Ala Ala Met Phe Met Tyr Met Arg Pro Ala Ser Lys His Thr Pro Asp
                        135
 Gln Asp Lys Met Val Ser Ala Phe Tyr Thr Asn Pro Ala
                    150
 <210> 2296
 <211> 325
 <212> PRT
<213> Mus musculus (M1 4726083-1-12568-18197 3361-4335)
<220>
<221> VARIANT
<222> (1)...(325)
<223> Xaa = Any Amino Acid
<400> 2296
Thr Met Trp Ser Asn Ile Ser Ala Ala Pro Phe Leu Leu Thr Gly Phe
           5
                                   10
Pro Gly Leu Glu Ala Ala His His Trp Ile Ser Ile Pro Phe Phe Ala
                                25
Ile Tyr Ile Ser Val Leu Leu Gly Asn Gly Thr Leu Leu Tyr Leu Ile
                            40
Lys Asp Asp His Asn Leu His Glu Pro Met Tyr Tyr Phe Leu Ala Met
                        55
                                            60
Leu Ala Gly Thr Asp Leu Thr Val Thr Leu Thr Thr Met Pro Thr Val
                    70
Met Ala Val Leu Trp Val Asn His Arg Glu Ile Arg His Gly Ala Cys
                85
                                    90
Phe Leu Gln Ala Tyr Ile Ile His Ser Leu Ser Ile Val Glu Ser Gly
                                105
Val Leu Leu Ala Met Ser Tyr Asp Arg Phe Val Ala Ile Cys Thr Pro
                            120
                                                125
Leu His Tyr Asn Ser Ile Leu Thr Asn Ser Arg Val Ile Ala Ile Gly
                       135
                                            140
Leu Gly Val Val Leu Arg Gly Phe Leu Ser Leu Val Pro Pro Ile Leu
                   150
                                        155
Pro Leu Phe Trp Phe Ser Tyr Cys Arg Ser His Val Leu Ser His Ala
               165
                                   170
Phe Cys Leu His Gln Asp Val Met Lys Leu Ala Cys Ala Asp Ile Thr
           180
                                185
```

```
Phe Asn Arg Ile Tyr Pro Val Val Leu Val Ala Leu Thr Phe Phe Leu
                                                205
                           200
Asp Ala Leu Ile Ile Val Phe Ser Tyr Val Leu Ile Leu Lys Thr Val
                       215
                                            220
Met Gly Ile Ala Ser Gly Glu Glu Arg Ala Lys Ala Leu Asn Thr Cys
                   230
                                        235
Val Ser His Ile Ser Cys Val Leu Val Phe Tyr Ile Thr Val Ile Gly
               245
                                   250
Leu Thr Phe Ile His Arg Phe Gly Lys Asn Ala Pro His Val Val His
           260
                                265
Ile Thr Met Ser Tyr Val Tyr Phe Leu Phe Pro Pro Phe Met Asn Pro
                            280
        275
Ile Ile Tyr Ser Ile Lys Thr Lys Gln Ile Gln Arg Ser Val Leu His
                       295
Leu Leu Ser Val Xaa Asp Asp Val Asn His Tyr Ile Ile Ile Gln Arg
                                        315
                   310
Ser Leu Gly Met Phe
<210> 2297
<211> 318
<212> PRT
<213> Mus musculus (M2 4726083-1-175-4296 2476-1523)
<400> 2297
Leu Ser Ala Met Pro Ser Met Trp Leu Asn Ile Ser Ser Ser Pro Phe
Leu Leu Thr Gly Phe Pro Gly Leu Glu Lys Ala His His Leu Ile Ser
Leu Pro Leu Leu Met Ala Tyr Ile Ser Ile Leu Leu Gly Asn Gly Thr
                            40
                                                45
Leu Leu Phe Leu Ile Lys Asp Asp His Asn Leu His Glu Pro Met Tyr
                       55
                                           60
Tyr Phe Leu Gly Met Leu Ala Ala Thr Asp Leu Gly Val Thr Leu Thr
                   70
                                        75
Thr Met Pro Thr Val Leu Ser Val Leu Trp Leu Asn His Arg Glu Ile
               85
                                    90
Gly His Gly Ala Cys Phe Ser Gln Ala Tyr Phe Ile His Thr Leu Ser
                                105
Ile Val Glu Ser Gly Val Leu Leu Ala Met Ala Tyr Asp Arg Phe Ile
                           120
                                                125
Ala Ile Arg Asn Pro Leu Arg Tyr Thr Thr Ile Leu Thr Asp Thr Lys
                       135
                                           140
Val Ile Lys Ile Gly Ile Gly Leu Val Met Arg Ala Gly Leu Ser Ile
                   150
                                       155
Met Pro Ile Ile Arg Leu His Trp Phe Pro Tyr Cys Arg Ser His
                                   170
               165
Val Leu Ser His Ala Phe Cys Leu His Gln Asp Val Ile Lys Leu Ala
                               185
           180
Cys Ala Asp Ile Thr Phe Asn Arg Leu Tyr Pro Val Val Val Phe
                           200
                                                205
Ala Met Val Leu Leu Asp Phe Leu Ile Ile Phe Phe Ser Tyr Val Leu
                                           220
                       215
Ile Leu Lys Thr Val Met Gly Ile Ala Ser Thr Asp Glu Arg Ala Lys
                   230
                                       235
Ala Leu Asn Thr Cys Val Ser His Ile Cys Cys Ile Leu Val Phe Tyr
                                   250
               245
Val Thr Val Val Gly Leu Thr Phe Ile His Arg Phe Gly Lys Asn Val
                               265
                                                    270
Pro His Val Val His Ile Thr Met Ser Tyr Ile Tyr Phe Leu Phe Pro
                            280
```

```
Pro Phe Met Asn Pro Val Ile Tyr Ser Ile Lys Thr Lys Gln Ile Gln
                        295
                                            300
Ser Gly Leu Leu Arg Leu Phe Ser Leu Pro Cys Ser Lys Thr
                    310
                                        315
<210> 2298
<211> 351
<212> PRT
<213> Mus musculus (M3 4726083-1-26023-28273 267-1318)
<220>
<221> VARIANT
<222> (1)...(351)
<223> Xaa = Any Amino Acid
<400> 2298
Leu Ser Pro Ser Leu Lys Pro Ser Cys Asn Cys Asp Pro Thr Met Trp
                                    10
Pro Asn Ser Ser Asp Ala Pro Phe Leu Leu Thr Gly Phe Leu Gly Leu
                                25
Glu Met Ile His His Trp Ile Ser Ile Pro Phe Phe Val Ile Tyr Phe
                            40
Ser Ile Ile Val Gly Asn Gly Thr Leu Leu Phe Ile Ile Trp Ser Asp
                       55
His Ser Leu His Glu Pro Met Tyr Tyr Phe Leu Ala Val Leu Ala Ser
                                      75
                   70
Met Asp Leu Gly Met Thr Leu Thr Thr Met Pro Thr Val Leu Gly Val
                                    90
               85
Leu Val Leu Asn Gln Arg Glu Ile Val His Gly Ala Cys Phe Ile Gln
                                105
Ser Tyr Phe Ile His Ser Leu Ala Ile Val Glu Ser Gly Val Leu Leu
                                               125
                            120
Ala Met Ser Tyr Asp Arg Phe Val Ala Ile Cys Thr Pro Leu His Tyr
                        135
Asn Ser Ile Leu Thr Asn Ser Arg Val Met Lys Met Ala Leu Gly Ala
                                        155
                   150
Leu Leu Arg Gly Phe Val Ser Ile Val Pro Pro Ile Met Pro Leu Phe
               165
                                   170
Trp Phe Pro Tyr Cys His Ser His Val Leu Ser His Ala Phe Cys Leu
                               185
                                                    190
           180
His Gln Asp Val Met Lys Leu Ala Cys Ala Asp Ile Thr Phe Asn Leu
                            200
                                                205
Ile Tyr Pro Val Val Leu Val Ala Leu Thr Phe Phe Leu Asp Ala Leu
                                            220
                        215
Ile Ile Ile Phe Ser Tyr Val Leu Ile Leu Lys Lys Val Met Gly Ile
                                       235
                   230
Ala Ser Gly Glu Glu Arg Lys Lys Ser Leu Asn Thr Cys Val Ser His
                                    250
               245
Ile Ser Cys Val Leu Val Phe Tyr Ile Thr Val Ile Gly Leu Thr Phe
                                                    270
                               265
Ile His Arg Phe Gly Lys Asn Ala Pro His Val Val His Ile Thr Met
                                                285
                           280
        275
Ser Tyr Val Tyr Phe Leu Phe Pro Pro Phe Met Asn Pro Ile Ile Tyr
                        295
Ser Ile Lys Thr Lys Gln Ile Gln Arg Ser Ile Leu Arg Leu Leu Ser
                                        315
                    310
Lys His Ser Arg Thr Xaa Ile Leu Ile Ile Asp Ser Gln Val Leu Tyr
               325
                                    330
Tyr Phe Trp Pro Phe Ile Arg Asn Lys Ser Cys Leu Lys Xaa Tyr
                                345
            340
```

```
<210> 2299
<211> 339
<212> PRT
<213> Mus musculus (M4 4761596-1-24347-28106 1259-2275)
<220>
<221> VARIANT
<222> (1)...(339)
<223> Xaa = Any Amino Acid
<400> 2299
Ala Ser Ser Phe His Asn Asp Thr Asn Pro Gln Asp Val Trp Tyr Val
                                   10
Leu Ile Gly Ile Pro Gly Leu Glu Asp Leu His Ser Trp Ile Ala Ile
                               25
Pro Ile Cys Ser Met Tyr Ile Val Ala Val Ile Gly Asn Val Leu Leu
                           40
                                               45
Ile Phe Leu Ile Val Thr Glu Arg Ser Leu His Glu Pro Met Tyr Phe
                                           60
                       55
Phe Leu Ser Met Leu Ala Leu Ala Asp Leu Leu Ser Thr Ala Thr
                    70
                                       75
Ala Pro Lys Met Leu Ala Ile Phe Trp Phe His Ser Arg Gly Ile Ser
                                   90
               85
Phe Gly Ser Cys Val Ser Gln Met Phe Phe Ile His Phe Ile Phe Val
                                105
Ala Glu Ser Ala Ile Leu Leu Ala Met Ala Phe Asp Arg Tyr Val Ala
                            120
                                                125
Ile Cys Tyr Pro Leu Arg Tyr Thr Thr Ile Leu Thr Ser Ser Val Ile
                        135
                                            140
Gly Lys Ile Gly Thr Ala Ala Val Val Arg Ser Phe Leu Ile Cys Phe
                    150
                                        155
Pro Phe Ile Phe Leu Val Tyr Arg Leu Leu Tyr Cys Gly Lys His Ile
                                   170
                165
Ile Pro His Ser Tyr Cys Glu His Met Gly Ile Ala Arg Leu Ala Cys
                                185
Asp Asn Ile Thr Val Asn Ile Ile Tyr Gly Leu Thr Met Ala Leu Leu
                           200
                                                205
Ser Thr Gly Leu Asp Ile Leu Leu Ile Ile Ser Tyr Thr Met Ile
                       215
                                           220
Leu Arg Thr Val Phe Gln Ile Pro Ser Trp Ala Ala Arg Tyr Lys Ala
                   230
                                       235
Leu Asn Thr Cys Gly Ser His Ile Cys Val Ile Leu Leu Phe Tyr Thr
                                   250
               245
Pro Ala Phe Phe Ser Phe Phe Ala His Arg Phe Gly Gly Lys Thr Val
           260
                                265
                                                    270
Pro Arg His Ile His Ile Leu Val Ala Asn Leu Tyr Val Val Val Pro
        275
                           280
Pro Met Leu Asn Pro Ile Ile Tyr Gly Val Lys Thr Lys Gln Ile Gln
                        295
                                           300
Asp Arg Val Val Phe Leu Phe Ser Ser Val Ser Thr Cys Gln His Asp
                 310
                                       315
Ser Arg Cys Xaa Arg Xaa His Ile Pro Lys Glu Asn Ser Phe Lys Cys
                                330
               325
His Pro Cys
<210> 2300
<211> 344
<212> PRT
<213> Mus musculus (M5 4761596-1-36028-37764 563-1594)
```

```
<220>
<221> VARIANT
<222> (1)...(344)
<223> Xaa = Any Amino Acid
<400> 2300
Ile Ser Glu Leu Thr Met Ile Lys Phe Asn Gly Ser Val Phe Met Pro
                                   10
Ser Val Leu Thr Leu Val Gly Ile Pro Gly Leu Glu Ser Val Gln Cys
           20
                               25
Trp Ile Gly Ile Pro Phe Cys Val Met Tyr Ile Ile Ala Met Ile Gly
                            40
Asn Ser Leu Ile Leu Val Ile Ile Lys Ser Glu Lys Ser Leu His Ile
                       55
Pro Met Tyr Ile Phe Leu Ala Ile Leu Ala Val Thr Asp Ile Ala Leu
                                       75
                   70
Ser Thr Cys Ile Leu Pro Lys Met Leu Gly Ile Phe Trp Phe His Met
               85
                                   90
Pro Gln Ile Ser Phe Asp Ala Cys Leu Leu Gln Met Glu Leu Ile His
                              105
Ser Phe Gln Ala Thr Glu Ser Gly Ile Leu Leu Ala Met Ala Leu Asp
                           120
                                              125
Arg Tyr Val Ala Ile Cys Asn Pro Leu Arg His Ala Thr Ile Phe Ser
                      135
Pro Gln Leu Thr Thr Cys Leu Gly Ala Gly Ala Leu Leu Arg Ala Phe
                   150
                                       155
Ile Leu Val Ser Pro Ser Ile Leu Leu Ile Lys Cys Arg Leu Lys Tyr
                                   170
                                                      175
               165
Phe Arg Thr Thr Ile Ile Ser His Ser Tyr Cys Glu His Met Ala Ile
                               185
Val Lys Leu Ala Ala Gln Asp Ile Arg Ile Asn Lys Ile Cys Gly Leu
                          200
                                               205
Leu Val Ala Phe Ala Ile Leu Gly Phe Asp Ile Val Phe Ile Thr Phe
                                           220
                       215
Ser Tyr Val Arg Ile Phe Ile Thr Val Phe Gln Leu Pro Gln Lys Glu
                                       235
                   230
Ala Arg Phe Lys Ala Phe Asn Thr Cys Ile Ala His Ile Cys Val Phe
                                   250
                                                       255
Leu Gln Phe Tyr Leu Leu Ala Phe Phe Ser Phe Phe Thr His Arg Phe
                              265
           260
Gly Ala His Ile Pro Pro Tyr Val His Ile Leu Leu Ser Asp Leu Tyr
                          280
Leu Leu Val Pro Pro Phe Leu Asn Pro Ile Val Tyr Gly Val Lys Thr
                       295
                                          300
Lys Gln Ile Arg Asp Gln Val Leu Lys Met Leu Phe Ser Lys Lys Pro
                                       315
                  310
Leu Val Ser Leu Ser Val Glu Lys Leu Cys Gly Phe Xaa Xaa Gln Leu
               325
Xaa Xaa Val Lys Leu Phe Ile Phe
           340
<210> 2301
<211> 347
<212> PRT
<213> Mus musculus (M6 4761596-1-45918-48570 619-1659)
<220>
<221> VARIANT
<222> (1)...(347)
```

<223> Xaa = Any Amino Acid

```
<400> 2301
Thr Gly Arg Phe Ser Met Ile Lys Phe Asn Gly Ser Val Phe Met Pro
Ser Val Leu Thr Leu Val Gly Ile Pro Gly Leu Glu Ser Val Gln Cys
            20
                                25
Trp Ile Gly Ile Pro Phe Cys Val Met Tyr Ile Ile Ala Met Ile Gly
                            40
Asn Ser Leu Ile Leu Val Ile Ile Lys Ser Glu Lys Ser Leu His Ile
                                            60
                        55
Pro Met Tyr Ile Phe Leu Ala Ile Leu Ala Val Thr Asp Ile Ala Leu
                    70
                                        75
Ser Thr Cys Ile Leu Pro Lys Met Leu Gly Ile Phe Trp Phe His Met
                                    90
Pro Gln Ile Ser Phe Asp Ala Cys Leu Leu Gln Met Glu Leu Ile His
                               105
Ser Phe Gln Ala Thr Glu Ser Gly Ile Leu Leu Ala Met Ala Leu Asp
                           120
                                                125
Arg Tyr Val Ala Ile Cys Asn Pro Leu Arg His Ala Thr Ile Phe Ser
                                            140
    130
                       135
Pro Gln Leu Thr Thr Cys Leu Gly Ala Gly Ala Leu Leu Arg Ser Leu
                   150
                                        155
Ile Thr Thr Phe Pro Leu Ile Leu Leu Ile Lys Phe Cys Leu Lys Tyr
                                    170
                                                        175
               165
Phe Arg Thr Thr Ile Ile Ser His Ser Tyr Cys Glu His Met Ala Ile
                                185
Val Lys Leu Ala Ala Gln Asp Ile Arg Ile Asn Lys Ile Cys Gly Leu
        195
                            200
                                                205
Leu Val Ala Phe Ala Ile Leu Gly Phe Asp Ile Val Phe Ile Thr Phe
                                            220
                        215
Ser Tyr Val Arg Ile Phe Ile Thr Val Phe Gln Leu Pro Gln Lys Glu
                    230
                                        235
Ala Arg Phe Lys Ala Phe Asn Thr Cys Ile Ala His Ile Cys Val Phe
                                   250
               245
Leu Gln Phe Tyr Leu Leu Ala Phe Phe Ser Phe Phe Thr His Arg Phe
            260
                                265
Gly Ala His Ile Pro Pro Tyr Val His Ile Leu Leu Ser Asp Leu Tyr
                           280
        275
                                                285
Leu Leu Val Pro Pro Phe Leu Asn Pro Ile Val Tyr Gly Ile Lys Thr
                        295
                                            300
Lys Gln Ile Arg Asp Gln Val Leu Lys Met Phe Phe Ser Lys Lys Pro
                    310
                                        315
Leu Xaa Thr Ser Val Thr Arg Ser Val Glu Lys Leu Cys Gly Phe Xaa
               325
                                   330
Leu Glu Leu Glu Xaa Val Lys Pro Xaa Ile Phe
            340
<210> 2302
<211> 351
<212> PRT
<213> Mus musculus (M7 5051393-1-104482-107691 2444-1393)
<220>
<221> VARIANT
<222> (1)...(351)
<223> Xaa = Any Amino Acid
<400> 2302
Val Leu Cys Thr Thr Leu Ser Xaa Gln Ser His Ser Ser Asn Xaa Ile
1
                5
                                    10
Gln Met Thr Met Val Asn Gln Ser Thr Pro Val Gly Phe Leu Leu Leu
                                25
```

```
Gly Phe Ser Glu His Pro Gln Leu Glu Lys Val Leu Phe Val Val Val
                             40
 Leu Cys Ser Tyr Leu Leu Thr Leu Leu Gly Asn Thr Leu Ile Leu Leu
                         55
 Leu Ser Thr Leu Asp Pro Arg Leu His Ser Pro Met Tyr Phe Phe Leu
                     70
 Ser Asn Leu Ser Phe Leu Asp Leu Cys Phe Thr Thr Cys Val Pro
                                     90
 Gln Met Leu Phe Asn Leu Trp Gly Pro Thr Lys Thr Ile Ser Phe Leu
            100
                                105
                                                     110
 Gly Cys Ser Val Gln Leu Phe Ile Phe Met Leu Leu Gly Thr Thr Glu
                            120
                                                 125
 Cys Ile Leu Leu Thr Val Met Ala Phe Asp Arg Tyr Val Ala Val Cys
                        135
                                            140
 Gln Pro Leu His Tyr Ala Thr Ile Ile His Pro Arg Leu Cys Arg Gln
                    150
                                        155
 Leu Ala Gly Val Ala Trp Ala Ile Gly Leu Val Gln Ser Ile Val Gln
                                    170
 Ile Pro Pro Thr Leu Thr Leu Pro Phe Cys Ser His Arg Gln Ile Asp
            180
                                 185
 Asp Phe Leu Cys Glu Val Pro Ser Leu Ile Arg Leu Ser Cys Gly Asp
                            200
                                                 205
 Thr Thr Phe Asn Glu Ile Gln Leu Ser Val Ala Gly Val Ile Phe Leu
                        215
                                            220
 Leu Val Pro Leu Ser Leu Ile Ile Val Ser Tyr Gly Val Ile Ala Arg
                    230
                                        235
 Ala Val Leu Lys Thr Asn Ser Ser Lys Gly Arg Arg Lys Ala Phe Gly
                245
                                    250
 Thr Cys Ser Ser His Leu Ile Val Val Thr Leu Phe Tyr Ser Ser Val
            260
                                265
 Ile Ala Val Tyr Leu Gln Pro Lys Asn Pro Tyr Ala Gln Glu Arg Ser
                            280
                                                285
Lys Phe Phe Gly Leu Phe Tyr Ala Val Gly Thr Pro Thr Leu Asn Pro
                        295
                                            300
Leu Val Tyr Thr Leu Arg Asn Lys Glu Val Lys Arg Ala Phe Trp Arg
                   310
                                        315
Leu Leu Gly Lys Asp Ala Ala Ser Gly Arg Asn Xaa Gly Gln Ile Leu
               325
                                    330
Val Xaa Phe Leu Asn Tyr Lys Val Ser Ser Xaa Tyr Val Tyr Cys
            340
                                345
                                                    350
<210> 2303
<211> 320
<212> PRT
<213> Mus musculus (M8 5051393-1-124150-125858 1430-472)
<220>
<221> VARIANT
<222> (1)...(320)
<223> Xaa = Any Amino Acid
<400> 2303
Arg Leu Asp Thr Glu Ile Met Val Asn Gln Ser Ser Pro Val Val Phe
               5
                                    10
Phe Leu Leu Gly Phe Ser Glu His Pro Gln Leu Glu Lys Val Leu Phe
                               25
Val Val Val Leu Cys Ser Tyr Leu Leu Thr Leu Leu Gly Asn Thr Leu
                        . 40
                                               45
Ile Leu Leu Ser Thr Leu Asp Pro Arg Leu His Thr Pro Met Tyr
                       55
Phe Phe Leu Ser Asn Leu Ser Phe Leu Asp Leu Cys Phe Thr Thr
```

```
Cys Val Pro Gln Met Leu Phe Asn Leu Trp Gly Pro Glu Lys Thr Ile
                                   90
Ser Phe Leu Gly Cys Phe Val Xaa Leu Phe Ile Phe Met Ser Leu Gly
                               105
           100
Thr Thr Glu Cys Ile Leu Leu Thr Val Met Ala Phe Asp Arg Tyr Val
                           120
                                               125
Ala Val Cys Gln Pro Leu His Tyr Ala Thr Val Ile Asn Pro Arg Leu
             · 135
                                           140
Cys Gln Gln Leu Ala Gly Ile Ala Trp Ala Ile Gly Leu Val Gln Ser
                   150
                                       155
Ile Val Gln Thr Pro Pro Thr Leu Lys Leu Pro Phe Cys Ser His Arg
                                   170
Gln Ile Asp Asn Phe Val Cys Glu Val Pro Ser Leu Ile Gln Leu Ser
                               185
                                                   190
           180
Cys Gly Asp Ile Thr Tyr Asn Glu Ile Gln Met Ala Val Ala Ser Ile
                           200
Phe Ile Val Val Val Pro Leu Ser Leu Ile Leu Val Ser Tyr Gly Ala
                        215
Ile Ala Arg Ala Val Leu Lys Ile Ser Ser Ala Lys Gly Arg Arg Lys
                   230
                                       235
Ala Phe Gly Thr Cys Ser Ser His Leu Ile Val Val Thr Leu Phe Tyr
                245
                                    250
Ser Ser Val Ile Ala Val Tyr Leu Gln Pro Lys Asn Pro Tyr Ala Arg
                                                   270
                               265
Glu Arg Gly Lys Phe Phe Gly Leu Phe Tyr Ala Val Gly Thr Pro Ile
                                                285
                            280
        275
Leu Asn Pro Leu Val Tyr Thr Leu Arg Asn Lys Glu Val Lys Arg Ala
                                            300
                        295
Phe Trp Lys Leu Leu Arg Lys Asp Glu Asp Ser Glu Glu Ser Trp Arg
                    310
<210> 2304
<211> 317
<212> PRT
<213> Mus musculus (M9 5051393-1-149569-151395 1755-805)
<220>
<221> VARIANT
<222> (1)...(317)
<223> Xaa = Any Amino Acid
<400> 2304
Pro Gln Ala Asn His Ser Ser Ala Glu Arg Phe Leu Leu Gly Phe
                                    10
Ser Asp Trp Pro Ser Leu Gln Pro Val Leu Phe Ala Leu Val Leu Leu
                                25
Cys Tyr Leu Leu Thr Leu Thr Gly Asn Ala Ala Leu Val Leu Leu Ala
                            40
Ile Arg Asp Pro Arg Leu His Thr Pro Met Tyr Tyr Phe Leu Cys His
                                           60
                       55
Leu Ala Leu Val Asp Val Gly Phe Thr Thr Ser Val Val Pro Pro Leu
                                        75
                    70
Leu Ala Ser Leu Arg Gly Ser Met Leu Gln Leu Pro Arg Ala Gly Cys
                                    90
Met Ala Gln Leu Cys Ser Ser Leu Ala Leu Gly Ser Ala Glu Cys Val
                               105
           100
Leu Leu Ala Val Met Ala Leu Asp Arg Ala Ala Ala Val Cys Asn Pro
                                               125
                           120
Leu Arg Tyr Thr Ser Leu Ala Ser Pro Leu Leu Cys Arg Thr Leu Ala
                        135
                                            140
```

```
Gly Val Ser Trp Leu Gly Gly Leu Ala Asn Ser Ala Ala Gln Thr Ala
                                       155
                   150
Leu Leu Ala Ala Arg Pro Leu Cys Ala Pro Arg Cys Leu Asp His Phe
                                   170
               165
Ile Cys Glu Leu Pro Ala Leu Leu Gln Leu Ala Cys Arg Gly Gly Arg
                               185
                                                   190
Ser Ala Thr Glu Arg Gln Met Phe Ala Ala Arg Val Val Ile Leu Leu
                           200
                                               205
Val Pro Ser Ala Val Ile Leu Ala Ser Tyr Ile Ala Val Gly Arg Ala
                                           220
                       215
Val Trp Gly Met His Ser Ser Ser Gly Trp Arg Lys Ala Ala Ser Thr
                   230
                                       235
Cys Gly Ser His Leu Thr Ala Val Cys Leu Phe Tyr Gly Ser Ala Thr
                                    250
               245
Tyr Thr Tyr Leu Gln Pro Thr His Ser Tyr Asn Gln Gly Arg Gly Lys
                                                   270
                                265
Phe Val Ser Leu Phe Tyr Thr Val Val Thr Pro Ala Leu Asn Pro Leu
                                               285
       275
                           280
Ile Tyr Thr Leu Arg Asn Lys Glu Val Lys Gly Ala Ala Leu Arg Leu
                    295
Leu Arg Ser Leu Gly Arg Pro Xaa Val Gly Gln Xaa Lys
                   310
<210> 2305
<211> 348
<212> PRT
<213> Mus musculus (M10 5051393-1-39874-41685 1277-235)
<220>
<221> VARIANT
<222> (1)...(348)
<223> Xaa = Any Amino Acid
<400> 2305
Val Leu Cys Thr Thr Leu Ser Xaa Gln Ser His Pro Ser Asn Xaa Ile
                                   10
                5
Gln Met Thr Met Val Asn Gln Ser Ser Pro Val Gly Phe Leu Leu
                               25
           20
Gly Phe Ser Glu His Pro Gln Leu Glu Lys Val Leu Ile Val Val Val
                            40
                                                45
Leu Cys Ser Tyr Leu Leu Thr Leu Leu Gly Asn Thr Leu Ile Leu Leu
                                           60
                       55
Leu Ser Thr Leu Asp Pro Arg Leu His Ser Pro Met Tyr Phe Phe Leu
                                       75
                   70
Ser Asn Leu Ser Phe Leu Asp Leu Cys Phe Thr Thr Cys Val Pro
                                   90
               85
Gln Met Leu Phe Asn Leu Trp Gly Pro Ala Lys Thr Ile Ser Phe Leu
                               105
                                                    110
           100
Gly Cys Phe Val Gln Leu Phe Ile Phe Leu Ser Leu Gly Thr Thr Glu
                                                125
       115
                           120
Cys Ile Leu Leu Ala Val Met Ser Phe Asp Arg Tyr Val Ala Val Cys
                                            140
                       135
Gln Pro Leu His Tyr Ala Thr Val Ile His Pro Arg Leu Cys Cys Gln
                                        155
                   150
Leu Ala Ala Val Ala Cys Thr Ile Gly Leu Val Glu Ser Val Val Gln
                                    170
               165
Thr Pro Ser Thr Leu Arg Leu Pro Phe Cys Pro His His Gln Val Asp
                                                   190
                               185
           180
Asp Phe Val Cys Glu Val Pro Ala Leu Ile Arg Leu Ser Cys Gly Asp
                                               205
                           200
Thr Thr Tyr Asn Glu Ile Gln Met Ala Val Ala Ser Val Phe Ile Leu
```

```
215
Val Val Pro Leu Ser Leu Ile Leu Val Ser Tyr Gly Ala Ile Ala Arg
                  230
                                       235
Ala Val Leu Arg Ile Ser Ser Ala Lys Gly Arg Arg Lys Ala Phe Gly
               245
                                   250
Thr Cys Ser Ser His Leu Ile Val Val Thr Leu Phe Tyr Ser Ser Val
                               265
Ile Ala Val Tyr Leu Gln Pro Lys Asn Pro Tyr Ala Arg Glu Arg Gly
                           280
                                               285
Lys Phe Phe Gly Leu Phe Tyr Ala Val Gly Thr Pro Ser Leu Asn Pro
                                           300
                       295
Leu Ile Tyr Thr Leu Arg Asn Lys Glu Val Lys Arg Ala Phe Arg Arg
                                       315
                  310
Leu Leu Trp Lys Glu Val Lys Pro Ser Xaa His Thr Leu Ser Lys Leu
              325
                                  330
Asn Gly Lys Ser Ala Cys Leu Val Gly Leu Ser Phe
           340
<210> 2306
<211> 347
<212> PRT
<213> Mus musculus (M11 5051393-1-46409-49345 2458-1419)
<220>
<221> VARIANT
<222> (1)...(347)
<223> Xaa = Any Amino Acid
<400> 2306
Cys Pro Lys Ser Thr Thr Ser Gly His Ile Glu Ser Cys Met Gly Gln
                                   10
Tyr Phe Gln Leu Asp Ser Xaa Gln Lys Gln Thr Met Val Asn Gln Ser
Ser Pro Val Gly Phe Leu Leu Gly Phe Ser Glu His Pro Gln Leu
                           40
Glu Lys Val Leu Phe Val Ile Val Leu Cys Ser Tyr Leu Leu Thr Leu
                                           60
                       55
Leu Gly Asn Thr Leu Ile Leu Leu Ser Thr Leu Asp Pro Arg Leu
                   70
                                       75
His Ser Pro Met Tyr Phe Phe Leu Ser Asn Leu Ser Phe Leu Asp Leu
                                   90
               85
Cys Phe Thr Thr Cys Val Pro Gln Met Leu Phe Asn Leu Trp Gly
                               105
Pro Ala Lys Thr Ile Ser Phe Leu Gly Cys Ser Val Gln Leu Phe Ile
                           120
                                               125
Phe Leu Ser Leu Gly Thr Thr Glu Cys Ile Leu Leu Thr Val Met Ser
                       135
                                           140
Phe Asp Arg Tyr Val Ala Val Cys Gln Pro Leu His Tyr Ala Thr Val
                   150
                                       155
Ile His Pro Arg Leu Cys Trp Lys Leu Ala Ala Val Ala Trp Met Met
               165
                                   170
Gly Leu Leu Gln Ser Ile Val Gln Thr Pro Pro Thr Leu Lys Leu Pro
                               185
                                                   190
           180
Phe Cys Pro His Arg Gln Ile Asp Asp Phe Leu Cys Glu Val Pro Ser
                           200
                                               205
Leu Ile Arg Leu Ser Cys Gly Asp Thr Thr Phe Asn Glu Ile Gln Leu
                       215
                                           220
Ala Val Ser Ser Val Ile Leu Val Val Val Pro Leu Ser Leu Ile Leu
                                       235
                   230
Val Ser Tyr Gly Ala Ile Ala Arg Ala Val Met Arg Ile Asn Ser Thr
               245
                                   250
```

```
Glu Ala Trp Lys Lys Ala Leu Arg Thr Cys Ser Ser His Leu Ile Val
                               265
Val Thr Leu Phe Tyr Ser Ser Val Ile Ala Val Tyr Leu Gln Pro Lys
                           280
                                               285
Asn Pro Tyr Ala Gln Glu Arg Gly Lys Phe Phe Gly Leu Phe Tyr Ala
                      295
                                           300
Val Gly Thr Pro Thr Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Lys
                                       315
                  310
Glu Val Lys Arg Ala Phe Trp Arg Leu Leu Gly Lys Asp Gly Asp Ser
               325
                                330
Lys Asn Thr Xaa Glu Ile Asn Ser Arg Arg Thr
           340
<210> 2307
<211> 326
<212> PRT
<213> Mus musculus (M12 5051393-1-65471-67664 1437-460)
<221> VARIANT
<222> (1)...(326)
<223> Xaa = Any Amino Acid
<400> 2307
Leu Asp Thr Glu Ile Met Val Asn Gln Ser Ser Pro Val Val Phe Phe
                                   10
                5
Leu Leu Gly Phe Ser Glu His Pro Gln Leu Lys Lys Val Leu Phe Val
                               25
           20
Val Val Leu Cys Ser Tyr Leu Leu Thr Leu Leu Gly Asn Thr Leu Ile
                           40
                                               45
Leu Leu Leu Ser Thr Leu Asp Pro Arg Leu His Ser Pro Met Tyr Phe
                                           60
                       55
Phe Leu Ser Asn Leu Ser Phe Leu Asp Leu Cys Phe Thr Thr Cys
                   70
Val Pro Gln Met Leu Phe Asn Leu Trp Gly Pro Ala Lys Thr Ile Ser
                                   90
Phe Leu Gly Cys Phe Val Gln Leu Phe Ile Phe Met Ser Leu Gly Thr
                                                  110
           100
                               105
Thr Glu Cys Ile Leu Leu Thr Val Met Ala Phe Asp Arg Tyr Val Ala
                          120
       115
Val Cys Gln Pro Leu His Tyr Ala Thr Lys Ile Asn Pro His Leu Cys
                       135
                                           140
Arg Gln Leu Ala Gly Ile Ala Trp Ala Ile Gly Leu Val Gln Ser Ile
                                       155
                   150
Val Gln Thr Pro Pro Thr Leu Lys Leu Pro Phe Cys Ser His Arg Gln
                                                       175
               165
                                   170
Ile Asp Asn Phe Leu Cys Glu Val Pro Ser Leu Ile Gln Leu Ser Cys
                                                   190
           180
                               185
Gly Asp Thr Thr Tyr Asn Glu Ile Gln Met Ala Val Ala Ser Ile Phe
                                               205
                           200
Ile Val Val Val Pro Leu Ser Leu Ile Leu Val Ser Tyr Gly Ala Ile
                                           220
                       215
    210
Ala Arg Ala Val Leu Lys Ile Ser Ser Ala Lys Gly Arg Arg Lys Ala
                   230
                                       235
Phe Gly Thr Cys Ser Ser His Leu Ile Val Val Thr Leu Phe Tyr Ser
                                   250
               245
Ser Val Ile Ala Val Tyr Leu Gln Pro Lys Asn Pro Tyr Ala Arg Glu
                               265
                                                  270
           260
Arg Gly Lys Phe Phe Gly Leu Phe Tyr Ala Val Gly Thr Pro Thr Leu
                           280
                                               285
        275
Asn Pro Leu Val Tyr Thr Leu Arg Asn Lys Glu Val Lys Arg Ala Phe
```

```
295
                                            300
Trp Lys Leu Leu Arg Lys Asp Glu Asp Ser Glu Glu Ser Xaa Arg Arg
                  310
Asn Thr Xaa His Thr Phe
                325
<210> 2308
<211> 282
<212> PRT
<213> Mus musculus (M13 6143913-1-1-2867 848-3)
<400> 2308
Leu Ile Ile Tyr Cys Leu Phe Leu Ser Phe Pro Gly Ile Met Asp His
                                    10
Val Asn Tyr Thr Trp Thr Arg Thr Phe Ile Leu Ala Gly Phe Thr Thr
            20
                                25
Ser Gly Thr Leu Gln His Leu Ala Val Phe Gly Thr Leu Cys Ile Tyr
                           40
Leu Leu Thr Leu Ala Gly Asn Leu Phe Ile Ile Val Leu Val Gln Ala
                        55
Asp Ser Gly Leu Ser Thr Pro Met Tyr Phe Phe Ile Ser Val Leu Ser
Phe Leu Glu Leu Trp Tyr Val Ser Thr Thr Val Pro Thr Leu Leu His
                85
                                    90
Thr Leu Leu His Gly Pro Ser Pro Ile Pro Ser Ser Ala Cys Phe Val
            100
                                105
                                                    110
Gln Leu Tyr Val Phe His Ser Leu Gly Met Thr Glu Cys Tyr Leu Leu
                            120
                                                125
Gly Val Met Ala Leu Asp Arg Tyr Leu Ala Ile Cys Arg Pro Leu His
                       135
                                            140
Tyr His Ala Leu Met Ser Arg Gln Val Gln Lys Gln Leu Val Gly Val
                   150
                                        155
Thr Trp Leu Ala Gly Phe Ser Ala Ala Leu Val Pro Ala Gly Leu Thr
               165
                                    170
Ala Ser Leu Pro Tyr Cys Leu Lys Glu Val Ala His Tyr Phe Cys Asp
                                185
Leu Ala Pro Val Met Gln Leu Ala Cys Val Asp Thr Ser Trp His Ala
                            200
                                                205
Arg Leu Tyr Ile Ala Val Ile Gly Met Ile Asn Thr Cys Asn Leu Thr
                       215
                                            220
Phe Ile Leu Gly Leu Tyr Gly Gly Ile Val Arg Ala Val Leu Lys Leu
                    230
                                        235
Pro Ser Ala Ala Ser Arg Ala Lys Ala Phe Ser Thr Cys Ser Ser His
                245
                                    250
Ile Thr Val Val Thr Leu Phe Phe Gly Ser Ala Phe Ile Val Tyr Val
           260
                               265
                                                    270
Gly Pro Pro Glu Ile Arg Ala Glu Gly Arg
       275
                            280
<210> 2309
<211> 333
<213> Mus musculus (M14 6143913-1-6180-10825 2950-1952)
<220>
<221> VARIANT
<222> (1)...(333)
<223> Xaa = Any Amino Acid
<400> 2310
Leu Leu Gly Thr Met Asp His Val Asn Tyr Thr Trp Thr Arg Thr
```

```
10
Phe Ile Leu Ala Gly Phe Thr Thr Ser Gly Ala Leu Arg Pro Leu Ala
                               25
Phe Leu Gly Thr Leu Cys Ile Tyr Leu Leu Thr Leu Ala Gly Asn Leu
                           40
       35
Phe Ile Ile Val Leu Val Gln Ala Asp Ser Gly Leu Ser Thr Pro Met
                                           60
                       55
Tyr Phe Phe Ile Ser Val Leu Ser Phe Leu Glu Leu Trp Tyr Val Ser
                   70
                                       75
Thr Thr Val Pro Thr Leu Leu His Thr Leu Leu His Gly His Ser Pro
                                   90
               85
Ile Pro Ser Ser Ala Cys Phe Val Gln Leu Tyr Val Phe His Ser Leu
                                                   110
                               105
          100
Gly Met Thr Glu Cys Tyr Leu Leu Gly Val Met Ala Leu Asp Arg Tyr
                           120
                                               125
Leu Ala Ile Cys Arg Pro Leu His Tyr His Ala Leu Met Ser Lys Gln
                                           140
                       135
Val Gln Leu Trp Leu Ala Gly Ala Thr Trp Val Ala Gly Phe Ser Ala
                  150
                                      155
Ala Leu Val Pro Ala Cys Leu Thr Ala Ser Leu Pro Tyr Cys Leu Lys
                                                      175
                                  170
               165
Glu Ile Ala His Tyr Phe Cys Asp Leu Ala Pro Leu Met Arg Leu Ala
                                                   190
                               185
           180
Cys Val Ser Thr Arg Trp His Ala Arg Val His Gly Ala Val Ile Gly
                           200
                                                205
       195
Val Ala Thr Gly Cys Asn Phe Val Leu Ile Leu Gly Leu Tyr Gly Gly
                                           220
                       215
Ile Leu Thr Ala Val Leu Lys Leu Pro Ser Ala Ala Ser Arg Ala Lys
                                       235
                   230
Ala Phe Ser Thr Cys Ser Ser His Met Thr Val Val Ala Leu Phe Tyr
                                   250
               245
Ala Ser Ala Phe Thr Val Tyr Val Gly Ser Pro Gln Ser Arg Pro Glu
                                                   270
                               265
Gly Thr Asp Lys Leu Ile Ala Leu Val Tyr Ala Leu Leu Thr Pro Phe
                           280
       275
Leu Asn Pro Ile Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Glu Ala
                       295
                                           300
Val Lys Arg Val Ser Glu Lys Ile Arg Thr Leu Leu Arg Asp Thr Xaa
                                       315
                   310
Leu Ser Leu Leu Thr Leu Pro Thr Phe Arg Val Asn Ala
               325
<210> 2311
<211> 120
<212> PRT
<213> Mus musculus (M15 6143913-1-66312-67763 687-330)
<220>
<221> VARIANT
<222> (1)...(120)
<223> Xaa = Any Amino Acid
<400> 2311
Val Thr Val Gly His Cys Leu Gly Gln Met Ser Leu Ser Val Asp Thr
                                   10
Asp Phe Leu Ile Glu Phe Phe Cys Leu Lys Arg Lys Glu Lys Lys Arg
                               25
Lys Lys Asp Cys Ser Pro Leu Tyr Leu Asp Ser Xaa Phe Gln Ser
                           40
      35
His Glu Ile Thr Gly Ser Phe Ser Phe Ser Val Phe His Arg Ser Leu
```

```
Leu Ser Asn Ile Ser Leu Gln Met Met Ala Tyr Phe Gln Ile Thr Leu
                   70
                                       75
Pro Ser Thr Phe Cys Ile Pro Xaa Gln Arg Ser Gln Thr Ser Ala Cys
                                  90
Ile Tyr Val Leu Asn Asn Leu Leu Ser Leu Phe His Ser Leu Ile Ser
                              105
         100
Ser Leu Xaa Pro Thr Ala Ser Thr
<210> 2312
<211> 323
<212> PRT
<213> Mus musculus (M16 6456795-1-106495-108409 847-1815)
Leu Ser Ser Tyr Gln Phe Leu Leu Glu Lys Lys Arg Pro Ile Met Asn
                                   10
Cys Ser Lys Thr Pro Gly Phe Ile Leu Leu Gly Leu Ser Ser Asp Pro
    20
                               25
Glu Lys Trp Gln Pro Leu Phe Asn Ile Phe Leu Cys Leu Tyr Leu Leu
                           40
Gly Leu Leu Gly Asn Leu Leu Leu Leu Ala Ile Gly Thr Asp Val
                       55
His Leu His Thr Pro Met Tyr Phe Phe Leu Ser Gln Leu Ser Leu Val
                   70
                                       75
Asp Leu Cys Phe Ile Thr Thr Thr Ala Pro Lys Met Leu Glu Ala Leu
                                   90
Trp Thr Gly Asp Gly Ser Ile Ser Phe Ser Gly Cys Leu Thr Gln Phe
            100
                               105
Tyr Phe Phe Ala Val Phe Ala Asp Met Asp Asn Leu Leu Ala Val
                           120
                                               125
Met Ala Ile Asp Arg Tyr Ala Ala Ile Cys His Pro Leu Phe Tyr Pro
                       135
                                           140
Phe Leu Met Thr Pro Cys Arg Cys Glu Val Leu Ala Ser Gly Ser Trp
                                       155
                   150
Gly Ile Ala His Cys Val Ser Leu Phe Tyr Thr Leu Leu Ser Gln
                                   170
Phe Tyr Tyr His Thr Asn Gln Gly Ile Pro His Phe Cys Asp Ser
                               185
                                                   190
           180
Arg Pro Leu Leu Leu Ser Cys Ser Asp Thr His Leu Ser Glu Gly
                                               205
                           200
Leu Met Met Ala Leu Ser Gly Val Leu Gly Met Ser Ser Val Leu Cys
                       215
                                           220
Leu Val Ser Ser Tyr Gly Cys Ile Phe Tyr Ala Val Ala Arg Val Pro
                                       235
                   230
Ser Ala Gln Gly Lys Arg Lys Ser Leu Ala Thr Cys Ser Ser His Leu
                                   250
               245
Ser Val Val Leu Leu Phe Tyr Ser Thr Val Phe Ala Thr Tyr Leu Lys
                                                  270
                               265
Pro Pro Ser Thr Ser His Ser Ser Ala Glu Val Val Ala Ala Val Met
                                               285
                           280
Tyr Thr Leu Val Thr Pro Thr Leu Asn Pro Phe Ile Tyr Ser Leu Arg
                      295
                                          300
Asn Lys Asp Val Lys Ser Ser Leu Arg Lys Ile Leu Asn Met Asp Lys
                                      315
                  310
Phe Gln Gly
<210> 2313
<211> 284
<212> PRT
```

1384

<213> Mus musculus (M17 6456795-1-108765-110526 1744-894) <220> <221> VARIANT <222> (1)...(284) <223> Xaa = Any Amino Acid <400> 2313 Cys Ile Tyr Ile Cys Val Cys Val Cys Val Cys Val Cys Val Cys Val 10 Cys Ile Ser Ile Cys Thr Tyr Leu His Ile Xaa Ile His Met Cys Val 20 25 Gln Val Val Ile Lys Leu Lys Val Lys Xaa Val Thr Trp Lys Glu Val 35 40 Xaa Lys Met Ser Val Glu Lys Arg Thr Gln Ser Arg Gln Lys Ser Gly 55 Tyr Leu Ala Asn Cys Phe Leu Gln Ser Phe Ile Leu Gly Ser Val Asp 75 70 Arg Asn Ile Cys Leu Leu Ile Val Met Val Tyr Asp His Tyr Leu Thr 85 90 Ile Cys His His Leu Xaa Tyr Pro Phe Leu Met Gly Pro Leu Trp Gly 105 100 Leu Gly Phe Gly Leu Thr Thr Ser Phe Val Val Asp Glu Leu Ile Val 120 125 115 Ala Leu Met Ala Gln Leu Arg Phe Cys Val Pro Lys Gln Ile Asp His 135 140 Phe Tyr Tyr Asp Phe Ser Pro Leu Val Val Leu Ala Tyr Thr Asp Thr 155 150 Gly Leu Val Gln Val Thr Thr Phe Val Leu Phe Val Val Phe Leu Thr 165 170 175 Val Pro Phe Gly Leu Val Leu Ile Ser Cys Ala Gln Ile Ala Val Thr 185 190 180 Val Leu Arg Val Pro Ser Arg Thr Arg Arg Asn Lys Ala Phe Ser Thr 205 200 195 Cys Ser Ser His Leu Asp Glu Val Ser Thr Phe Tyr Gly Ser Leu Met 215 220 Val Trp Tyr Thr Glu Pro Ser Ala Val His Ser Gln Ile Leu Ser Lys 235 230 Val Ile Ala Leu Leu Tyr Thr Val Val Thr Thr Ile Phe Asp Pro Gly 250 245 Ile Tyr Thr Leu Arg Asn Gln Glu Val Gln Gln Ser Leu Arg Arg His 265 270 260 Leu Tyr Cys Lys Pro Thr Glu Met Xaa Pro Lys Arg 275 280 <210> 2314 <211> 312 <213> Mus musculus (M18 6456795-1-142088-143512 370-1305) <400> 2314 Ile Ser Pro Arg Met Asn Cys Ser Gln Ala Pro Gly Phe Ile Leu Leu 1 5 Gly Leu Pro Arg Glu Pro Glu Lys Trp Gln His Phe Phe Ile Ile Phe 25 Leu Gly Leu Tyr Leu Leu Gly Leu Leu Gly Asn Leu Leu Leu Leu Leu 35 40 Ala Ile Gly Ser Asp Val His Leu His Thr Pro Met Tyr Phe Phe Leu 55 Ser Gln Leu Ser Leu Val Asp Leu Cys Phe Ile Thr Thr Ala Pro 75

```
Lys Thr Leu Glu Thr Trp Trp Thr Gly Asp Gly Ser Ile Ser Phe Ser
Gly Cys Leu Thr Gln Leu Tyr Phe Phe Gly Val Phe Ala Asp Met Asp
                               105
Asn Leu Leu Ala Val Met Ala Ile Asp Arg Tyr Ala Ala Ile Cys
                           120
                                               125
His Pro Leu Leu Tyr Pro Leu Leu Met Thr Pro Cys Arg Cys Glu Val
                      135
                                           140
Leu Val Ser Gly Ser Trp Gly Ile Ala His Cys Val Ser Leu Met Tyr
                   150
                                       155
Thr Leu Leu Ser Gln Leu Tyr Phe His Thr Asn Gln Glu Ile Pro
               165
                                  170
Arg Phe Phe Cys Asp Cys Arg Pro Leu Leu Leu Ser Cys Ser Asp
                                                  190
          180
                               185
Thr His Leu Asn Glu Val Leu Met Met Ala Leu Ala Gly Val Leu Gly
                           200
                                               205
Val Ser Ala Val Leu Cys Ile Val Ser Ser Tyr Gly Cys Ile Phe Tyr
                                           220
                       215
Ala Val Ala Arg Val Pro Ser Ala Gln Gly Lys Arg Lys Ala Leu Thr
                   230
                                       235
Thr Cys Ser Ser His Leu Ser Val Val Leu Leu Phe Tyr Ser Thr Val
               245
                                   250
Phe Ala Thr Tyr Leu Lys Pro Pro Ser Thr Ser His Ser Ser Gly Glu
                               265
Val Val Ala Ala Val Met Tyr Thr Leu Val Thr Pro Thr Leu Asn Pro
                           280
                                               285
Phe Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Ser Ser Leu Arg Arg
                       295
Val Leu Asn Ile Glu Lys Ser Gln
                   310
<210> 2315
<211> 325
<213> Mus musculus (M19 6456795-1-14626-16881 1501-527)
<220>
<221> VARIANT
<222> (1)...(325)
<223> Xaa = Any Amino Acid
<400> 2315
Cys Pro Phe Leu Xaa Val Met Ser Asn Gln Thr Ser Val Thr Glu Phe
Leu Leu Cly Val Thr Asp Ile Gln Glu Leu Asn Pro Ile Leu Phe
           20
                               25
Val Ile Phe Phe Thr Ile Tyr Phe Val Asn Ile Thr Gly Asn Gly Ala
                           40
                                                45
Ile Leu Met Ile Val Ile Leu Asp Pro Arg Leu His Ser Pro Met Tyr
                                           60
                       55
Phe Phe Leu Gly Asn Leu Ala Cys Leu Asp Ile Cys Phe Ser Thr Val
                                       75
                   70
Thr Leu Pro Lys Met Leu Gln Asn Leu Leu Ser Thr Asn Lys Ala Ile
                                   90
Ser Phe Leu Gly Cys Ile Thr Gln Leu His Phe Phe His Phe Leu Gly
           100
                               105
Ser Thr Glu Ala Met Leu Leu Pro Val Met Ala Phe Asp Arg Phe Val
                           120
Ala Ile Cys Arg Pro Leu His Tyr Ser Val Ile Met Asn His Gln Leu
                       135
                                           140
Cys Ile His Met Thr Val Thr Ile Trp Thr Leu Gly Phe Phe His Ala
```

```
155
                   150
Leu Leu His Ser Val Met Thr Ser Arg Leu Ser Phe Cys Gly Pro Asn
                                 170
               165
His Val His His Phe Phe Cys Asp Ile Lys Pro Leu Leu Asp Leu Ala
                            185
                                       190
Cys Gly Asn Thr Glu Leu Asn Leu Trp Leu Leu Asn Thr Val Thr Gly
                         200
                                      205
Thr Ile Ala Leu Thr Pro Phe Phe Leu Thr Phe Leu Ser Tyr Phe Tyr
                                        220
                     215
Ile Ile Thr Tyr Leu Phe Leu Lys Thr Arg Ser Cys Ser Met Leu His
                  230
                                      235
Lys Ala Leu Ser Thr Cys Ala Ser His Phe Met Val Val Ile Leu Leu
                                  250
               245
Tyr Val Pro Val Leu Phe Thr Tyr Ile Arg Pro Ala Ser Gly Ser Ser
                              265
                                              270
Leu Asp Gln Asp Arg Ile Ile Ala Ile Met Tyr Ser Val Val Thr Pro
                                            285
                         280
Ala Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Lys Glu Val Arg Ser
                                        300
                     295
Ala Leu Asn Arg Lys Val Arg Arg Trp Leu Xaa Phe Glu Glu Ile Xaa
                                     315
                310
Ile Thr Leu Leu Trp
               325
<210> 2316
<211> 237
<212> PRT
<213> Mus musculus (M20 6456795-1-147325-149242 1694-983)
<220>
<221> VARIANT
<222> (1)...(237)
<223> Xaa = Any Amino Acid
<400> 2316
Leu Xaa Thr Tyr Ile Pro Thr His Thr His Thr His Thr His Thr His
                                  10
Thr His Thr His Ile Tyr Ile Cys Asn Tyr Asn Val Gln Arg Asn Asn
                              25
Gly Tyr Gln Val Asp His Tyr Leu Xaa Ile Cys His Pro Leu His Tyr
                         40
Pro Leu Leu Met Gly His Gln Trp Cys Leu Gly Phe Val Leu Thr Leu
                      55
Gln Leu Phe Gly Ile Thr Val Asp Gly Leu Val Val Ile Leu Val Ala
                  70
                                     75
Gln Met Trp Phe Cys Gly Pro Asn Leu Ile Asp Tyr Phe Xaa Tyr Asn
                                 90
            85
Phe Ser Pro Ile Met Asp Leu Ala Xaa Ser Asp Thr Gln Val Phe Gln
                              105
Val Ile Thr Phe Val Leu Ser Val Val Phe Leu Thr Val Pro Phe Gly
                          120
                                             125
Leu Val Leu Ile Ser Tyr Ile Gln Ile Val Val Thr Val Leu Arg Val
                                         140
                      135
Leu Ser Gly Asp Arg Arg Thr Lys Asp Phe Ser Thr Cys Ser Ser His
                  150
                                     155
Leu Ala Val Val Ser Thr Phe Tyr Arg Ser Leu Met Val Leu Tyr Thr
                                 170 175
Val Pro Leu Leu Ser Lys Val Ile Ala Leu Leu Tyr Lys Val Val
                             185
                                   190
Ile Pro Ile Phe Asn His Val Ile Tyr Thr Leu Arg Asn Gln Glu Val
                          200
```

```
Pro Xaa Ala Leu Arg Arg His Leu Tyr Cys Lys Pro Thr Glu Met Xaa
                 215
Pro Lys Met Glu Gly Ser Lys Asp Phe Leu Phe Asn Cys
<210> 2317
<211> 237
<212> PRT
<213> Mus musculus (M21 6456795-1-153518-155435 1694-983)
<220>
<221> VARIANT
<222> (1)...(237)
<223> Xaa = Any Amino Acid
<400> 2317
Leu Xaa Thr Tyr Ile Pro Thr His Thr His Thr His Thr His
       5
                                   10
Thr His Thr His Ile Tyr Ile Cys Asn Tyr Asn Val Gln Arg Asn Asn
           20
                               25
Gly Tyr Gln Val Asp His Tyr Leu Xaa Ile Cys His Pro Leu His Tyr
                           40
Pro Leu Leu Met Gly His Gln Trp Cys Leu Gly Phe Val Leu Thr Leu
Gln Leu Phe Gly Ile Thr Val Asp Gly Leu Val Val Ile Leu Val Ala
                   70
                                       75
Gln Met Trp Phe Cys Gly Pro Asn Leu Ile Asp Tyr Phe Xaa Tyr Asn
               85
                                   90
Phe Ser Pro Ile Met Asp Leu Ala Xaa Ser Asp Thr Gln Val Phe Gln
                               105
Val Ile Thr Phe Val Leu Ser Val Val Phe Leu Thr Val Pro Phe Gly
                           120
Leu Val Leu Ile Ser Tyr Ile Gln Ile Val Val Thr Val Leu Arg Val
                       135
Leu Ser Gly Asp Arg Arg Thr Lys Asp Phe Ser Thr Cys Ser Ser His
                   150
                                      155
Leu Ala Val Val Ser Thr Phe Tyr Arg Ser Leu Met Val Leu Tyr Thr
                                   170
                                                      175
               165
Val Pro Leu Leu Ser Lys Val Ile Ala Leu Leu Tyr Lys Val Val
                               185
                                                   190
           180
Ile Pro Ile Phe Asn His Val Ile Tyr Thr Leu Arg Asn Gln Glu Val
                           200
                                               205
Pro Xaa Ala Leu Arg Arg His Leu Tyr Cys Lys Pro Thr Glu Met Xaa
                       215
Pro Lys Met Glu Gly Ser Lys Asp Phe Leu Phe Asn Cys
                   230
<210> 2318
<211> 318
<212> PRT
<213> Mus musculus (M22 6456795-1-37464-41929 1501-549)
<220>
<221> VARIANT
<222> (1)...(318)
<223> Xaa = Any Amino Acid
<400> 2318
Cys Val Ile Phe Xaa Val Met Leu Asn Gln Thr Ser Val Thr Glu Phe
                                  10
Ile Leu Leu Gly Val Arg Asp Ile Gln Glu Pro Gln Pro Phe Leu Phe
```

```
Ala Ile Phe Phe Thr Ile Tyr Phe Val Asn Ile Thr Gly Asn Gly Ala
                             40
 Ile Leu Met Ile Val Ile Leu Asp Pro Arg Leu His Ser Pro Met Tyr
                         55
 Phe Phe Leu Gly Asn Leu Ala Cys Leu Asp Ile Ser Tyr Ser Thr Val
                     70
                                         75
 Thr Val Pro Lys Met Leu Glu Asn Leu Leu Ser Thr Asn Lys Ala Ile
                                     90
 Ser Leu Leu Gly Cys Ile Thr Gln Leu His Phe Phe His Phe Leu Gly
                                105
 Thr Thr Glu Ser Leu Leu Leu Ala Val Met Ala Phe Asp Arg Phe Val
         115
                            120
                                                125
 Ala Ile Cys Arg Pro Leu His Tyr Ser Val Ile Met Asn Trp Gln Val
                        135
                                             140
 Cys Ile Leu Met Ala Val Thr Ile Trp Thr Ile Ala Phe Leu His Ala
                    150
                                        155
 Leu Leu His Ser Val Met Thr Ser Arg Leu Ser Phe Cys Gly Leu Asn
                 165
                                    170
 His Ile His His Phe Phe Cys Asp Val Lys Pro Leu Leu Glu Leu Ala
                                 185
                                                     190
 Cys Gly Asn Thr Glu Leu Asn Leu Trp Leu Leu Asn Thr Val Thr Gly
         195
                             200
                                                205
 Thr Ile Ala Ser Val Pro Phe Phe Leu Thr Phe Leu Ser Tyr Phe Tyr
                        215
                                             220
 Ile Ile Thr Tyr Leu Phe Leu Lys Thr Arg Ser Cys Ser Met Leu His
                    230
                                         235
 Lys Ala Leu Ser Thr Cys Ala Ser His Phe Met Val Val Leu Phe
                                     250
Tyr Ala Pro Val Leu Phe Thr Tyr Ile Arg Pro Thr Ser Gly Ser Ser
            260
                                265
                                                    270
Leu Asp Gln Asp Arg Ile Ile Ala Ile Met Tyr Ser Val Val Thr Pro
        275
                            280
Ala Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Lys Glu Val Arg Ser
                        295
                                            300
Ala Leu Asn Arg Lys Val Arg Arg Trp Leu Leu Leu Glu Glu
                   310
<210> 2319
<211> 308
<212> PRT
<213> Mus musculus (M23 6456795-1-63066-65167 771-1694)
<400> 2319
Val Leu Leu Asn His Thr Leu Val Thr Glu Phe Leu Leu Gly Val
                5
                                    10
Thr Asp Ile Gln Glu Leu Asn Pro Ile Leu Phe Val Thr Val Leu Ala
            20
                                25
Met Tyr Phe Val Asn Val Ala Gly Asn Gly Ala Ile Leu Met Ile Val
                            40
Ile Ser Asp Pro Arg Leu His Leu Pro Met Tyr Phe Phe Leu Gly Asn
                        55
                                         - 60
Leu Ala Cys Leu Asp Ile Cys Phe Ser Thr Val Thr Val Pro Lys Met
                    70
                                        75
Leu Glu Asn Phe Phe Ser Thr Ser Lys Ala Ile Ser Phe Leu Gly Cys
                85
                                    90
Ile Thr Gln Leu His Phe Phe Asn Phe Leu Gly Ser Thr Glu Ala Leu
           100
                               105
                                                    110
Leu Leu Thr Val Met Ala Phe Asp Arg Phe Val Ala Ile Cys Arg Pro
                           120
Leu His Tyr Pro Ala Ile Met Asn Ser Gln Val Cys Ile Gln Val Ala
```

```
140
                       135
Ile Ser Ile Trp Ala Ile Pro Phe Leu His Ala Leu Val His Ser Ile
                                      155
                  150
Leu Thr Ser Gln Leu Asn Phe Cys Gly Ser Asn His Ile His His Phe
               165
                                   170
Phe Cys Asp Val Lys Pro Leu Leu Glu Leu Ala Cys Gly Asn Thr Glu
                               185
           180
Leu Asn Arg Trp Leu Leu Asn Thr Leu Thr Gly Thr Val Ala Ile Gly
                                               205
                          200
      195
Leu Phe Phe Leu Thr Phe Leu Ser Tyr Phe Tyr Ile Val Thr Tyr Leu
                       215
                                           220
Phe Leu Lys Thr Arg Ser Cys Ser Met Leu His Lys Ala Leu Ser Thr
                                       235
                   230
Cys Ala Ser His Phe Met Val Val Met Ile Phe Tyr Ala Pro Val Leu
               245
                                   250
Phe Ile Tyr Ile Asn Pro Asp Ser Gly Ser Ser Leu Glu Lys Asp Arg
                               265
Ile Ile Ala Val Met Tyr Thr Val Val Thr Pro Ala Leu Asn Pro Leu
                          280
Ile Tyr Thr Leu Arg Asn Lys Glu Val Arg Gly Ala Leu Asn Arg Lys
                                           300
                      295
   290
Ile Arg Ile Leu
<210> 2320
<211> 325
<212> PRT
<213> Mus musculus (M24 6456795-1-750-2697 1501-527)
<220>
<221> VARIANT
<222> (1)...(325)
<223> Xaa = Any Amino Acid
<400> 2320
Cys Pro Phe Leu Xaa Val Met Ser Asn Gln Thr Ser Val Thr Glu Phe
                5
                                   10
1
Leu Leu Gly Val Thr Asp Ile Gln Glu Leu Asn Pro Ile Leu Phe
                               25
Val Ile Phe Phe Thr Ile Tyr Phe Ile Asn Ile Thr Gly Asn Gly Ala
                           40
Ile Leu Met Ile Val Ile Leu Asp Pro Arg Leu His Ser Pro Met Tyr
                       55
Phe Phe Leu Gly Asn Leu Ala Cys Leu Asp Ile Ser Tyr Ser Thr Val
                                        75
                    70
Thr Val Pro Lys Leu Leu Gln Asn Leu Leu-Ser Thr Ser Lys Ala Ile
                                    90
Ser Phe Leu Gly Cys Ile Thr Gln Leu His Phe Phe His Phe Leu Gly
                               105
            100
Ser Thr Glu Thr Met Leu Leu Pro Val Met Ala Phe Asp Arg Phe Val
                                               125
                            120
Ala Ile Cys Arg Pro Leu His Tyr Ser Val Ile Met Asn His Gln Leu
                                           140
                        135
Cys Ile His Met Thr Val Thr Ile Trp Thr Leu Gly Phe Phe His Ala
                                       155
                    150
Leu Leu His Ser Val Met Thr Ser Arg Leu Ser Phe Cys Gly Pro Asn
                                   170
                165
His Val His His Phe Phe Cys Asp Ile Lys Pro Leu Leu Asp Leu Ala
                               185
                                                   190
           180
Cys Gly Asn Thr Glu Leu Asn Leu Trp Leu Leu Asn Thr Val Thr Gly
                            200
```

```
Thr Ile Ala Leu Thr Ser Phe Phe Leu Ile Phe Leu Ser Tyr Phe Tyr
                                           220
                       215
Ile Ile Thr Asn Leu Leu Lys Thr Arg Ser Cys Ser Met Leu His
                   230
                                       235
Lys Ala Leu Ser Thr Cys Ala Ser His Phe Met Val Val Leu Phe
                                   250
               245
Tyr Ala Pro Val Leu Phe Thr Tyr Ile Arg Pro Ala Ser Gly Ser Ser
                                                   270
           260
                               265
Leu Asp Gln Asp Thr Ile Ile Ala Ile Met Tyr Ser Val Val Thr Pro
                           280
                                               285
Ala Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Lys Glu Val Arg Ser
                                      300
                       295
Ala Leu Asn Arg Lys Val Arg Arg Trp Leu Xaa Pro Glu Glu Ser Lys
                                      315
               310
Glu Val Phe Phe Ser
<210> 2321
<211> 177
<212> PRT
<213> Mus musculus (M25 6456795-1-78460-79066 2-526)
<220>
<221> VARIANT
<222> (1)...(177)
<223> Xaa = Any Amino Acid
<400> 2321
Val Ser Ala His Val Cys Met Gly Cys Xaa Leu Ser Trp Pro Val Arg
                                   10
Cys Glu Ile Ile Phe Gly Val Met His Thr Thr Val Asn Phe Ser Ile
          20
                               25
Val Leu Cys Gly Thr Ser Val Ile His Xaa Phe Cys Asp Val Leu Leu
Val Leu Lys Leu Ser Cys Leu Tyr Asp His Val Ser Glu Ile Ala Ile
                                           60
                       55
Ser Asp Phe Ser Ile Ser Leu Ala Phe Phe Cys Phe Ile Ser Pro Asn
                                       75
                   70
Phe Thr Tyr Val His Ile Phe Ser Thr Glu Leu Arg Met Pro Phe Val
              85
                                   90
Glu Gly Lys Thr Ser Val Phe Ser Thr Cys Leu Cys His Met Thr Ser
                               105
                                                   110
           100
Ile Leu Phe Ile Pro Thr Gly Ile Phe Glu Phe Leu Arg Ser His Thr
                                               125
                           120
Glu Ser Ser Thr Ser Leu Asp Phe Ile Leu Asn Phe Ser Tyr Phe Ser
                       135
                                           140
Leu Ser Thr Leu Asn Pro Gly Ile Tyr Ser Leu Arg Asn Glu Ala Val
                                       155
                  150
Asp Thr Val Gln Arg Lys Ile Phe Phe Phe Lys Glu Lys Tyr Leu Phe
                                   170
Leu
<210> 2322
<211> 308
<212> PRT
<213> Mus musculus (M26 6456795-1-84123-87238 211-1134)
Val Leu Leu Asn His Thr Phe Ile Thr Glu Phe Leu Leu Gly Val
```

```
Thr Asp Ile Gln Glu Leu Asn Pro Ile Leu Phe Val Met Val Leu Ala
                                25
Met Tyr Phe Ile Asn Val Phe Gly Asn Gly Ala Ile Met Met Ile Val
                            40
Ile Leu Asp Ser Arg Leu Tyr Ser Pro Met Tyr Phe Phe Leu Gly Asn
                        55
Leu Ala Cys Leu Asp Ile Cys Phe Ser Thr Val Thr Val Pro Lys Met
                                        75
Leu Glu Asn Phe Phe Ser Thr Ser Lys Ala Ile Ser Phe Leu Gly Cys
                                    90
                85
Ile Thr Gln Leu His Phe Phe His Phe Leu Gly Cys Thr Asp Ala Leu
            100
                                105
Leu Leu Thr Val Met Ala Phe Asp Arg Phe Val Ala Ile Cys Arg Pro
                           120
        115
                                                125
Leu His Tyr Pro Ser Ile Met Asn Arg Gln Val Cys Ile Gln Val Ala
                        135
                                            140
Ala Thr Ile Trp Ala Ile Pro Phe Leu His Ala Leu Val His Ser Ile
                    150
                                        155
Leu Thr Ser Gln Leu Asn Phe Cys Gly Ser Asn Arg Ile His His Phe
                165
                                    170
                                                        175
Phe Cys Asp Val Lys Pro Leu Leu Glu Leu Ala Cys Gly Asn Thr Glu
           180
                               185
Leu Asn Arg Trp Leu Leu Asn Thr Leu Ala Gly Thr Ile Gly Ile Gly
       195
                           200
Leu Phe Phe Leu Thr Phe Leu Ser Tyr Phe Tyr Ile Val Thr Tyr Leu
                       215
                                            220
Phe Leu Lys Thr His Ser Cys Ser Met Leu His Lys Ala Leu Ser Thr
225
                    230
                                        235
Cys Ala Ser His Phe Met Val Val Met Ile Phe Tyr Ala Pro Val Leu
                245
                                    250
Phe Ile Tyr Ile Asn Pro Asp Ser Gly Ser Ser Leu Glu Lys Asp Arg
            260
                                265
                                                    270
Ile Ile Ala Val Met Tyr Thr Val Val Thr Pro Ala Leu Asn Pro Leu
                            280
                                                285
Ile Tyr Ala Leu Arg Asn Lys Glu Val Arg Cys Ala Leu Asn Arg Lys
                        295
Leu Arg Ile Leu
305
<210> 2323
<211> 314
<212> PRT
<213> Mus musculus (M27 6456795-1-89089-90071 35-969)
<220>
<221> VARIANT
<222> (1)...(314)
<223> Xaa = Any Amino Acid
<400> 2323
Ser Leu Phe Tyr Ser Gln Arg Ser Arg Met Asn Val Ala Asn Phe Thr
                5
                                    10
Ala Met Thr Ile Phe Leu Leu Met Gly Phe Ser Arg Asn Ser Gln
            20
                                25
Val Glu Ile Ile Phe Ser Thr Leu Ala Leu Val Val Leu Ile Gly Thr
                            40
Ile Ser Ile Val Ala Val Thr Ser Leu Ser Ile Arg Leu Cys Ser Leu
                        55
Met Pro Phe Leu Leu Ile His Leu Phe Cys Phe Asp Val Cys Tyr Ile
                    70
Ser Val Met Met Pro Lys Ser Val Cys Ser Ser Phe Met Tyr Ser Ala
```

```
90
 Tyr Ile Ser Leu Ile Glu Cys Thr Leu Gln Val Phe Tyr Ser Gln Ser
             100
                                105
 Ser Tyr Thr Ala Met Ala Ile Leu Thr Val Met Ser Tyr Asp Cys Tyr
                            120
                                                 125
 Met Ala Val Trp His Lys Val Ile Thr Asn Val Ser Thr Cys Ile His
                        135
                                             140
 Gly Val Leu Ala Val Leu Val Asn Gly Cys Glu Ile Ile Phe Gly Val
                    150
                                        155
 Met His Thr Thr Leu Thr Phe Ser Ile Tyr Ile Cys Gly Thr Ser Thr
                165
                                    170
 Ile Arg Xaa Phe Cys Asp Val Leu Leu Val Leu Lys Leu Ser Phe Thr
            180
                                185
 Asn Asp His Val Asn Glu Leu Glu Ser Leu Ala Phe Ser Ser Val Glu
        195
                            200
                                                205
 Gly Arg Thr Lys Ser Phe Ser Thr Cys Leu Gly His Val Ser Val Gly
                        215
                                            220
Ser Leu Phe Asn Pro Pro Gly Val Phe Glu Phe Leu Asn Pro Tyr Ser
                    230
                                        235
Glu Ser Pro Thr Ser Leu Asp Ile Ile Val Thr Val Phe Ile Leu Pro
                245
                                    250
Gln Thr Leu Ser Val Glu Ile Tyr Ser Leu Ser Asn Glu Ala Ile Asp
            260
                                265
Thr Ala Xaa Arg Lys Phe Phe Phe Gln Arg Lys Thr Ser Leu Ser Ile
                            280
                                                285
Leu His Tyr Phe Leu Leu Gly Ser His Ile Xaa Xaa Val Leu Arg Lys
                        295
Thr Thr Val Ser Met Asn Gln Leu Lys Leu
                    310
<210> 2324
<211> 309
<212> PRT
<213> Mus musculus (M28 6456795-1-95949-101645 434-1360)
Val Leu Leu Asn Gln Thr Leu Val Thr Glu Phe Leu Leu Gly Val
                                    10
Thr Asp Ile Gln Glu Leu Asn Pro Ile Leu Phe Val Thr Val Leu Ala
           20
                                25
Met Tyr Phe Val Asn Val Ala Gly Asn Gly Ala Ile Leu Leu Ile Val
                            40
Ile Ser Asp Pro Arg Leu His Ser Pro Met Tyr Phe Phe Leu Gly Asn
                        55
Leu Ala Cys Leu Asp Ile Cys Phe Ser Thr Val Thr Val Pro Lys Ile
                   70
                                        75
Leu Asp Asn Phe Phe Ser Thr Ser Lys Ala Ile Ser Phe Leu Gly Cys
                85
                                    90
Ile Thr Gln Leu Tyr Phe Phe His Leu Leu Gly Ser Thr Glu Ala Leu
                                105
Leu Leu Ala Val Met Ala Phe Asp Arg Phe Val Ala Ile Cys Arg Pro
        115
                            120
                                                125
Leu His Tyr Pro Ser Ile Met Asn Gly Gln Val Cys Ile Gln Val Ala
                        135
Ile Ser Ile Trp Ala Ile Pro Phe Val His Ala Leu Val His Ser Ile
                    150
                                        155
Leu Thr Ser Gln Leu Asn Phe Cys Gly Ser Asn Gln Ile His His Phe
               165
                                   170
Phe Cys Asp Val Lys Pro Leu Leu Glu Leu Ala Cys Gly Asn Thr Glu
                               185
Leu Asn Arg Trp Leu Leu Asn Thr Phe Thr Gly Thr Phe Ala Ile Gly
```

```
200
       195
Leu Phe Phe Leu Thr Phe Leu Ser Tyr Phe Tyr Ile Ile Thr Tyr Leu
                                           220
                       215
Phe Leu Lys Thr Arg Ser Cys Ser Met Leu His Lys Ala Leu Ser Thr
                   230
                                       235
Cys Ala Ser His Phe Met Val Val Met Ile Phe Tyr Ala Pro Val Leu
               245
                                   250
Phe Ile Tyr Ile Asn Pro Asp Ser Gly Ser Ser Leu Glu Lys Asp Arg
                               265
           260
Ile Ile Ala Val Met Tyr Thr Val Val Thr Pro Ala Leu Asn Pro Leu
                          280
                                               285
Ile Tyr Thr Leu Arg Asn Lys Glu Val Arg Gly Ala Leu Asn Arg Lys
                       295
Leu Arg Ile Leu Leu
<210> 2325
<211> 296
<212> PRT
<213> Mus musculus (M29 6691272-106-1-1090 908-19)
<220>
<221> VARIANT
<222> (1)...(296)
<223> Xaa = Any Amino Acid
<400> 2325
Cys Ile Phe Ile Gly Val Phe Leu Ile Ser Ser Ala Ser Gly Ala Met
1
                                    10
Pro Gly Gln Asn Tyr Ser Thr Ile Ser Glu Phe Ile Leu Phe Gly Phe
                                25
           20
Ser Ala Phe Pro His Gln Met Leu Pro Ala Leu Phe Leu Leu Tyr Leu
                            40
Leu Met Tyr Leu Phe Thr Leu Leu Gly Asn Leu Val Ile Met Ala Ala
                                            60
                        55
Ile Trp Thr Glu His Arg Leu His Thr Pro Met Tyr Leu Phe Leu Cys
                   70
                                       75
Ala Leu Ser Ile Ser Glu Ile Leu Phe Thr Val Val Ile Thr Pro Arg
               85
                                   90
Met Leu Ser Asp Met Leu Ser Thr His Arg Ser Ile Thr Phe Ile Ala
           100
                               105
                                                    110
Cys Ala Asn Gln Leu Phe Phe Ser Phe Thr Phe Gly Tyr Thr His Ser
                           120
                                                125
Phe Leu Leu Val Val Met Gly Tyr Asp Arg Tyr Val Ala Ile Cys Arg
                        135
                                            140
Pro Leu His Tyr His Ala Leu Met Ser Leu Gln Gly Cys Ala Arg Leu
                   150
                                       155
Val Ala Trp Ser Trp Ala Gly Gly Ser Leu Ile Gly Met Ala Leu Thr
                165
                                   170
Ile Ile Ile Phe His Leu Thr Phe Cys Glu Ser Asn Val Ile His His
           180
                               185
Ile Leu Cys His Val Phe Ser Leu Leu Lys Leu Ala Cys Gly Glu Arg
                                               205
      195
                            200
Thr Ala Phe Val Thr Ile Ala Val Ile Leu Val Cys Val Thr Pro Leu
                                            220
                        215
Ile Gly Cys Leu Val Phe Ile Ile Leu Ser Tyr Ile Phe Ile Val Ala
                   230
                                       235
Ala Ile Leu Arg Ile Pro Ser Thr Glu Gly Arg His Lys Thr Phe Ser
               245
                                   250
Thr Cys Ala Ser His Leu Thr Val Val Ile Val His Tyr Gly Phe Ala
                               265
```

```
Ser Leu Ile Tyr Leu Gln Gly Tyr Pro Leu Glu Ser Asp Xaa Thr Gly
                       280
Met Ser Ser Trp His Ala Ser Phe
<210> 2326
<211> 334
<212> PRT
<213> Mus musculus (M30 6691273-103-1206-2961 586-1585)
<220>
<221> VARIANT
<222> (1)...(334)
<223> Xaa = Any Amino Acid
<400> 2326
Trp Ala Asn Gln Ser Arg Ala Arg Glu Leu Glu Phe Val Leu Leu Gly
            5
                                   10
Phe Ala His Val Pro Ser Leu Arg Pro Met Leu Ala Ala Leu Phe Leu
          20
                                25
Ala Ala Phe Leu Leu Thr Met Ser Gly Asn Ser Leu Ile Val Leu Leu
                            40
                                                45
Thr Ser Leu Asp Phe Gly Leu Arg Thr Pro Met Tyr Phe Phe Leu Arg
                        55
Gln Leu Ala Leu Val Glu Ile Cys Phe Ser Leu Asp Val Ala Pro Arg
                    70
                                        75
Leu Leu Val Thr Leu Leu Gln Pro Gly Arg Gly Val Ser Pro Thr Ser
                85
                                    90
Cys Ala Leu Gln Leu Leu Leu Val Leu Ser Cys Val Thr Ser Glu Cys
            100
                               105
Phe Leu Leu Met Val Met Ala Trp Asp Arg Phe Leu Ala Ile Cys Arg
                            120
                                                125
Pro Leu Arg Tyr Gly Ala Ile Met Ser Pro Gln Leu Cys Tyr Leu Leu
                        135
                                            140
Ala Thr Thr Cys Trp Leu Ala Gly Ile Pro Val Ala Leu Val Phe Thr
                   150
                                       155
Ile Trp Leu Phe Asn Phe Pro Phe Cys Gly Pro Arg Gly Ile Arg His
                165
                                    170
Phe Phe Cys Asp Ile Ala Pro Leu Leu Ser Leu Val Cys Ala Asp Thr
            180
                                185
Arg Val Phe Glu Ala Asn Val Phe Val Ala Thr Val Leu Val Ile Met
                            200
                                                205
Val Pro Phe Cys Leu Ile Ala Thr Ser Tyr Val Met Ile Leu Val Ala
                       215
                                            220
Val Leu Arg Met Pro Ser Ala Ser Gly Arg His Lys Ala Leu Ser Thr
                    230
                                       235
Cys Ala Ser His Leu Ile Val Val Ile Leu Phe Tyr Gly Thr Thr Gly
               245
                                    250
Val Ile His Leu Arg Pro Lys Ala Ser Tyr Ser Pro Glu Ser Lys Gln
           260
                               265
                                                    270
Val Val Ser Leu Ser Tyr Thr Met Val Thr Pro Met Leu Asn Pro Leu
        275
                            280
                                                285
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Ala Ala Phe Gly Arg Val
                        295
                                            300
Cys Cys Gly Arg Xaa Glu Ser Arg Leu His Glu Xaa Thr His Leu Leu
                    310
                                        315
Cys Gln Pro Phe Ser Val Arg Xaa Leu Leu Arg Pro Thr Phe
                325
                                    330
<210> 2327
```

<210> 2327 <211> 330

```
<212> PRT
 <213> Mus musculus (M31 6691273-105-4369-6206 1597-608)
 <220>
 <221> VARIANT
 <222> (1)...(330)
 <223> Xaa = Any Amino Acid
<400> 2327
Val Leu Leu Xaa Cys Tyr Xaa Arg Thr Asp Asp Asn Asn Trp Leu Val
                                    10
Ser Leu Gln Met Ala Arg Ser Leu Glu Leu Ala Asn Met Thr Arg Val
                                25
Gln Lys Phe Leu Leu Gly Leu Ser Thr Arg Leu Asp Ile Arg Asp
                            40
                                                45
Ala Leu Phe Ala Val Phe Leu Thr Leu Tyr Leu Leu Thr Leu Val Glu
                        55
                                            60
Asn Thr Leu Ile Ile Tyr Leu Ile Phe Ser His Lys Glu Leu His Lys
                    70
                                        75
Pro Met Tyr Phe Phe Leu Gly Asn Leu Ser Cys Leu Glu Met Cys Tyr
                                    90
Val Ser Val Thr Met Pro Thr Leu Leu Val Gly Leu Trp Thr Gly Pro
                                105
Tyr His Ile Pro Phe Thr Leu Cys Met Thr Gln Leu Phe Phe Ile
        115
                            120
Val Leu Ile Cys Thr Glu Cys Thr Leu Leu Ala Ser Met Ala Tyr Asp
                        135
                                            140
Arg Tyr Val Ala Ile Cys Arg Pro Leu His Tyr Pro Leu Leu Met Arg
                    150
                                        155
Pro Gln Val Cys Leu Gly Leu Ala Leu Ser Ser Trp Leu Gly Gly Leu
                                    170
Ile Val Ser Val Ala Lys Thr Thr Cys Ile Ala Ser Leu Ser Tyr Cys
                                185
Gly Pro Asn Val Leu Asn Gln Phe Phe Cys Asp Val Ser Pro Leu Leu
                            200
                                                205
Asn Leu Ser Cys Thr His Val Ala Leu Thr Glu Leu Val Asp Phe Ile
                        215
                                            220
Ser Ala Ile Val Ile Phe Cys Gly Thr Leu Leu Val Ser Leu Ala Ser
                    230
                                        235
Tyr Ser Ala Ile Gly Met Ala Val Leu Arg Met Pro Ser Ala Ala Ala
                245
                                    250
Arg Arg Lys Ala Phe Ser Thr Cys Ala Ser His Leu Val Val Val Gly
                                265
                                                    270
Ile Phe Tyr Ser Ala Ala Leu Phe Ile Tyr Cys Arg Pro Ser Arg Ile
        275
                            280
Lys Ser Met Asp Leu Asn Lys Val Leu Ser Val Ile Tyr Thr Val Val
                        295
                                            300
Thr Pro Leu Cys Asn Pro Ile Ile Tyr Cys Leu Arg Asn Lys Glu Val
                   310
                                        315
His Thr Val Leu Lys Lys Thr Leu His Trp
               325
                                    330
<210> 2328
<211> 319
<212> PRT
<213> Mus musculus (M32 6691273-108-10257-11726 1388-432)
<220>
<221> VARIANT
<222> (1)...(319)
<223> Xaa = Any Amino Acid
```

```
<400> 2328
Leu Val Pro Ser Phe Gln Arg His Thr Met Ala Asn Leu Ser Thr Val
                                    10
                5
Ser Val Phe Ile Leu Gln Gly Phe Ser Ala Val Pro Ala Leu Gln Leu
                                25
Leu Ser Met Ala Ile Phe Leu Leu Ile Tyr Leu Ala Ala Val Leu Gly
                            40
                                               45
Asn Val Ser Ile Met Ile Ala Val Thr Leu Asp Ser His Leu His Thr
                                            60
                       55
Pro Met Tyr Phe Phe Ile Lys His Leu Ser Leu Val Asp Leu Cys Ser
                   70
Thr Ser Thr Thr Leu Pro Arg Ala Leu Val Ala Thr Met Ala Asp Thr
                                    90
Lys Glu Ile Ser Leu Pro Ala Cys Ala Ser Gln Leu Phe Ala Phe Val
                               105
Cys Phe Gly Ser Leu Glu Cys Phe Leu Ile Thr Ala Met Ala Phe Asp
                                               125
                           120
       115
Arg Cys Leu Ala Ile Tyr Arg Pro Leu Thr Tyr Gly Val Thr Met Ser
                      135
                                           140
Ser Gln Thr Cys Val Ser Leu Val Val Val Ala Trp Val Ser Gly Leu
                                       155
                  150
Leu Phe Ser Thr Phe His Met Val Asn Thr Phe Ser Leu Pro Phe Cys
                                   170
               165
Gly Pro Asn Met Ile Asp His Phe Phe Cys Asp Ile Pro Pro Leu Met
           180
                               185
His Leu Ala Cys Gly Asp Thr Gln Gly His Glu Ala Ala Gly Phe Ile
                            200
                                                205
Val Ser Gly Cys Val Ile Met Thr Cys Phe Ala Leu Thr Cys Leu Ser
                                            220
                       215
Tyr Val Leu Ile Val Tyr Thr Val Val His Ile Arg Ser Ala Ala Gly
                   230
                                        235
Arg Trp Lys Ala Phe Ser Thr Cys Ser Ser His Leu Ala Thr Val Leu
                                   250
Leu Phe Tyr Gly Thr Gly Ser Ser Ala Tyr Met Gln Pro Thr Ala His
                                                   270
           260
                               265
Tyr Ser Pro Leu Gln Gly Arg Met Ala Ala Ile Phe Tyr Ser Ile Leu
                                               285
                           280
Met Pro Thr Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Met
                                        300
                       295
Lys Ala Ala Leu Arg Lys Leu Tyr Pro Gln Val Pro Ser Xaa Ile
                   310
<210> 2329
<211> 133
<212> PRT
<213> Mus musculus (M33 6850399-12-3847-5066 800-1195)
<220>
<221> VARIANT
<222> (1) ... (133)
<223> Xaa = Any Amino Acid
<400> 2329
Thr Glu Leu Asn Ser Cys Leu Gln Trp Leu Pro Ile Leu His Arg Ser
                                   10
1
Thr Thr Glu Ala Ser Ser Ala Val Leu Xaa Glu Leu Leu Gln Arg
                               25
Pro Ala Ser Ala Leu Xaa Pro Pro Ile Gly Ser Ser Asp Leu Ala Gly
                           40
                                               45
Cys Phe Ser Val Tyr Ile Leu Thr Leu Thr Asp Asn Thr Thr Val Arg
```

```
60
Ile Asn Ser Phe Leu Asn His Lys Leu His Thr Pro Met Ser Ser Phe
                                        75
                    70
Cys Phe Gly Leu Ser Ile Leu Asp Leu Cys Phe Thr Pro Ser Thr Val
                                    90
Pro Pro Asp His Gln Ile Leu Gly Asn Pro Xaa Gly Pro Glu Lys Leu
                                105
           100
Ala Ile Leu Val Xaa Ala Ile Gln Leu Ser Val Ala Leu Gly Phe Gly
                            120
        115
Ser Thr Val Cys Val
   130
<210> 2330
<211> 191
<212> PRT
<213> Mus musculus (M35 6850399-2-1-641 21-587)
<220>
<221> VARIANT
<222> (1)...(191)
<223> Xaa = Any Amino Acid
<400> 2330
Asp Ala Ile Ser Gln Pro Leu His Tyr Gly Ala Ile Thr His Ser Glu
                                    10
Ile Leu Trp Gln Leu Ala Thr Val Ala Gln Ile Ser Gly Phe Val Glu
                                25
           20
Phe Arg Ser Pro Ser Ile Phe Gln Leu Pro Arg Cys Gly Gly Gly
                            40
Val Val Cys Lys Ala Xaa Asn Tyr Leu Cys Arg His Asn Phe Pro Gly
                        55
                                            60
Lys Xaa Leu Ser Thr Val Thr Ala Leu Cys Val Val Thr Leu Met Gly
                                        75
                   70
Leu Val Leu Val Ser Tyr Val Ser Ile Val Lys Gly Val Leu Arg Gly
                                    90
                85
Gly Pro Ile Glu Asp Met Gly Lys Ala Phe Gly Thr Cys Gly Tyr His
                                                    110
                                105
Leu Ile Ala Gly Leu Leu Phe Phe Lys Ala Ile Ile Ser Val Tyr Thr
                            120
His Pro Arg Asn Glu Phe Thr Gly Ser His Gly Lys Pro Phe Leu Leu
                                            140
                        135
Leu Tyr Pro Val Val Met Pro Ser Leu Gly Pro Leu Ile Asp Thr Leu
                   150
                                        155
Arg Ser Gln Glu Ser Ser Arg Val Ile Lys Arg Leu Val Ala Lys Asp
                    7:
                                   170
                165
Xaa Lys Leu Ser Arg Lys Asn Thr Xaa Cys Thr Ser Arg Ser Trp
                                185
<210> 2331
<211> 320
<212> PRT
<213> Mus musculus (M36 7263202-1-54100-55962 166-1125)
<400> 2331
Ser Ser Gln Ala Pro Glu Lys Gln Gln Asp Asn Gly Thr Trp Leu Val
Thr Glu Phe Leu Leu Val Gly Phe Ser Asn Leu Pro Glu Leu Arg Pro
                                25
Thr Leu Phe Ile Leu Phe Leu Leu Thr Tyr Leu Val Thr Leu Ser Gly
                            40
                                                45
Asn Ala Thr Ile Ile Thr Ile Ile Gln Val Asp Arg Thr Leu His Thr
```

```
Pro Met Tyr Arg Phe Leu Ala Val Leu Ser Leu Ser Glu Thr Cys Tyr
                                       75
                   70
Thr Leu Val Thr Ile Pro Asn Met Leu Ala His Leu Leu Met Glu Ser
               85
                                   90
Gln Ala Ile Ser Ile Ala Gly Cys Arg Ala Gln Met Phe Phe Leu
                               105
           100
Gly Leu Gly Cys Ser His Cys Phe Leu Leu Thr Leu Met Gly Tyr Asp
                           120
                                              125
Arg Tyr Val Ala Ile Cys His Pro Leu Arg Tyr Ser Val Ile Met Arg
                                           140
                       135
Pro Thr Val Cys Leu Cys Leu Gly Ala Leu Val Phe Cys Ser Gly Phe
                  150
                                       155
Ser Val Ala Leu Ile Glu Thr Cys Met Ile Phe Ser Ser Pro Phe Cys
                                   170
               165
Gly Ala Gly His Val Glu His Phe Phe Cys Asp Ile Ala Pro Val Leu
                               185
                                                  190
           180
Lys Leu Ser Cys Asp Glu Ser Ser Leu Lys Gly Leu Gly Ile Phe Phe
                          200
                                               205
       195
Leu Ser Ile Leu Val Val Leu Val Ser Phe Leu Phe Ile Leu Leu Ser
                       215
                                           220
Tyr Ala Phe Ile Val Ala Ala Ile Val Arg Ile Pro Ser Ala Ser Gly
                   230
                                       235
Arg Arg Lys Ala Phe Ser Thr Cys Ala Ala His Leu Thr Val Val Ile
                                   250
               245
Val His Phe Gly Cys Ala Ser Ile Ile Tyr Leu Arg Pro Asp Ser Gly
                               265
                                                   270
          260
Ala Asn Pro Ser Gln Asp Arg Leu Val Ala Val Phe Tyr Thr Val Val
                           280
                                               285
Thr Pro Leu Leu Asn Pro Val Val Tyr Thr Leu Arg Asn Lys Glu Val
                                          300
                       295
Arg Val Ala Leu Arg Lys Asn Leu Ala Arg Gly Cys Gly Ala Phe Lys
                   310
<210> 2332
<211> 122
<212> PRT
<213> Mus musculus (M38 7340303-58-1-1344 4-367)
<220>
<221> VARIANT
<222> (1)...(122)
<223> Xaa = Any Amino Acid
<400> 2332
His Leu Ser Glu Glu Val Gly Phe Ala Val Ser Ser Cys Ile Val Met
               5
                                  10
Ser Ser Phe Ala Leu Thr Val Val Ser Tyr Ile Gly Ile Val Ala Thr
                               25
        20
Val Leu Arg Ile Pro Ser Val Glu Gly Arg Trp Lys Ala Phe Ser Thr
                           40
       35
Cys Ser Ser His Leu Thr Thr Val Ile Leu Phe Tyr Gly Thr Gly Ser
                       55
                                           60
Phe Val Tyr Leu Arg Pro Ala Ser Gln Tyr Ser Pro Thr Leu Gly Pro
                                       75
                   70
Leu Ala Ser Ile Phe Tyr Ser Val Val Thr Pro Ser Leu Asn Pro Val
                                   90
               85
Val Tyr Cys Leu Arg Asn Lys Asp Met Lys Phe Ala Leu Gln Lys Leu
           100
Tyr Cys Gly Arg Lys Tyr Xaa Asp Leu Glu
                           120
```

```
<210> 2333
<211> 356
<212> PRT
<213> Mus musculus (M41 7363372-318-7546-10891 3278-2211)
<220>
<221> VARIANT
<222> (1)...(356)
<223> Xaa = Any Amino Acid
<400> 2333
Tyr Val Phe Phe Cys Phe Gln Tyr Ser Xaa Glu Trp Lys Thr Glu Leu
                5
                                   10
Glu Met Asp Val Ser Asn Gln Thr Thr Val Thr Glu Phe Val Leu Leu
                                25
           20
Gly Leu Ser Ala His Pro Lys Leu Glu Lys Thr Phe Phe Val Leu Ile
                           40
Leu Ser Met Tyr Leu Val Ile Leu Leu Gly Asn Gly Val Leu Ile Leu
                        55
Val Ser Ile Leu Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu
                    70
Gly Asn Leu Ser Phe Leu Asp Ile Cys Tyr Thr Thr Ser Ser Val Pro
                                   90
Leu Val Leu Asp Gly Phe Leu Thr Pro Arg Lys Thr Ile Ser Phe Ser
            100
                               105
Gly Cys Ala Val Gln Met Phe Leu Ser Phe Ala Met Gly Ala Thr Glu
                          120
                                               125
       115
Cys Val Leu Leu Gly Met Met Ala Phe Asp Arg Tyr Val Ala Ile Cys
                                          140
                       135
Asn Pro Leu Arg Tyr Pro Val Val Met Asn Lys Ala Ala Tyr Val Pro
                                    155
                   150
Met Ala Val Ser Ser Trp Val Ala Gly Gly Ala Asn Ser Leu Val Gln
                                    170
                165
Ile Ser Leu Ala Val Gln Leu Pro Phe Cys Gly Asp Asn Val Ile Asn
                               185
His Phe Ile Cys Glu Ile Leu Ala Val Leu Lys Leu Ala Cys Ala Asp
                            200
                                                205
Ile Ser Ile Asn Val Ile Ser Met Gly Val Ala Asn Val Ile Phe Leu
                                           220
                        215
Gly Val Pro Val Leu Phe Ile Phe Val Ser Tyr Ile Phe Ile Leu Ser
                                        235
                    230
Thr Ile Leu Arg Ile Pro Ser Ala Glu Gly Arg Lys Lys Ala Phe Ser
                                    250
                245
Thr Cys Ser Ala His Leu Thr Val Val Ile Ile Phe Tyr Gly Thr Ile
                                                    270
                            -- 265
Leu Phe Met Tyr Gly Lys Pro Lys Ser Lys Asp Pro Leu Gly Ala Asp
                                                285
                           280
Lys Gln Asp Leu Ala Asp Lys Leu Ile Ser Leu Phe Tyr Gly Leu Leu
                                           300
                       295
Thr Pro Met Leu Asn Pro Ile Ile Tyr Ser Leu Arg Asn Lys Asp Val
                   310
                                        315
Lys Ala Ala Val Arg Asn Leu Ala Ser His Arg Cys Leu Thr Phe Xaa
                                    330
                325
Trp Arg Asp Arg Ala His Asp Pro His Val Leu Met Ala Leu Thr Xaa
                               345
                                                    350
           340
Glu Ser Tyr Cys
        355
<210> 2334
<211> 331
```

1400

<212> PRT <213> Mus musculus (M42 7363372-319-4901-8603 988-1980) Cys Pro Leu Leu Ser Gln Asp Gly Lys Arg Thr Cys Glu Met Glu Gly 10 5 Ala Asn Gln Ser Thr Val Ala Glu Phe Val Leu Leu Gly Leu Ser Asp 25 20 His Pro Lys Leu Glu Lys Thr Phe Phe Val Leu Ile Leu Leu Met Tyr Leu Val Ile Leu Leu Gly Asn Gly Val Leu Ile Leu Val Ser Ile Leu Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Gly Asn Leu Ser 70 75 Phe Leu Asp Ile Cys Tyr Thr Thr Ser Ser Ile Pro Leu Val Leu Asp 90 85 Gly Phe Leu Thr Pro Arg Lys Thr Ile Ser Phe Ser Gly Cys Ala Val 105 110 Gln Met Phe Leu Ser Phe Ala Met Gly Ala Thr Glu Cys Val Leu Leu 125 120 Gly Met Met Ala Phe Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu Arg 135 140 Tyr Pro Val Val Met Asn Lys Ser Ala Tyr Val Pro Met Ala Val Ser 145 150 155 Ser Trp Val Ala Gly Gly Ala Asn Ser Leu Val Gln Ile Ser Leu Ala 170 Val Gln Leu Pro Phe Cys Gly Asp Asn Val Ile Asn His Phe Thr Cys 185 180 Glu Ile Leu Ala Val Leu Lys Leu Ala Cys Ala Asp Ile Ser Ile Asn 205 200 Val Ile Ser Met Gly Val Ala Asn Val Ile Phe Leu Gly Val Pro Val 215 220 Leu Phe Ile Phe Val Ser Tyr Ile Phe Ile Leu Ser Thr Ile Leu Arg 230 235 Ile Pro Ser Ala Glu Gly Arg Lys Lys Ala Phe Ser Thr Cys Ser Ala 250 255 245 His Leu Thr Val Val Leu Val Phe Tyr Gly Thr Ile Leu Phe Met Tyr 270 260 265 Gly Lys Pro Lys Ser Lys Asp Pro Leu Gly Ala Asp Lys Gln Asp Val 285 280 275 Ser Asp Lys Leu Ile Ser Leu Phe Tyr Gly Val Leu Thr Pro Met Leu 295 300 Asn Pro Ile Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Ala Ala Val 315 310 Arg Asn Leu Val Gly Gln Lys Cys Leu Ile Gln . 325 <210> 2335 <211> 324 <212> PRT <213> Mus musculus (M43 7363372-320-18353-20567 840-1811) <220> <221> VARIANT <222> (1)...(324) <223> Xaa = Any Amino Acid <400> 2335 Asn Met Glu Arg Ser Asn Lys Thr Thr Pro Val Ser Ser Phe Ile Leu 10 5 Leu Gly Leu Ser Ala His Pro Lys Leu Glu Lys Thr Phe Phe Val Leu

```
Ile Leu Leu Met Tyr Leu Val Ile Leu Leu Gly Asn Val Val Leu Ile
                            40
Leu Val Ser Ile Leu Asp Ser His Leu His Thr Pro Met Tyr Phe Phe
                       55
Leu Gly Asn Leu Ser Phe Leu Asp Ile Cys Tyr Thr Thr Ser Ser Val
                                        75
                   70
Pro Leu Ile Leu Asp Ser Phe Leu Thr Pro Arg Lys Thr Ile Ser Phe
               85
Ser Gly Cys Ala Val Gln Met Phe Leu Ser Phe Ala Met Gly Ala Thr
                                105
Glu Cys Val Leu Leu Gly Met Met Ala Phe Asp Arg Tyr Val Ala Ile
                           120
                                                125
Cys Asn Pro Leu Arg Tyr Pro Val Val Met Ser Lys Ala Ala Tyr Val
                       135
                                            140
Pro Met Ala Ala Gly Ser Trp Val Ser Gly Ser Ile Thr Ala Thr Val
                   150
                                        155
Gln Ile Ser Leu Ala Met Thr Leu Pro Phe Cys Gly Asp Asn Val Ile
                                    170
                                                        175
               165
Asn His Phe Thr Cys Glu Ile Leu Ala Val Leu Lys Leu Ala Cys Ala
                                185
           180
Asp Ile Ser Ile Asn Val Ile Ser Met Ala Val Ala Asn Ala Met Phe
                            200
                                                205
        195
Leu Gly Val Pro Val Leu Phe Ile Phe Val Ser Tyr Ile Phe Ile Leu
                        215
                                            220
Ser Thr Ile Leu Arg Ile Pro Ser Ala Glu Gly Arg Lys Lys Ala Phe
                                        235
                   230
Ser Thr Cys Ser Ala His Leu Thr Val Val Leu Val Phe Tyr Gly Thr
               245
                                   250
Ile Leu Phe Met Tyr Gly Lys Pro Lys Ser Lys Asp Pro Leu Gly Ala
                               265
                                                   270
Asp Lys Gln Asp Leu Ala Asp Lys Leu Ile Ser Leu Phe Tyr Gly Val
       275
                           280
                                                285
Val Thr Pro Met Leu Asn Pro Ile Ile Tyr Ser Leu Arg Asn Lys Asp
                                            300
                       295
Val Lys Ala Ala Val Thr Asn Leu Val Gly Gln Lys His Phe Lys Trp
Xaa Trp Cys Met
<210> 2336
<211> 257
<212> PRT
<213> Mus musculus (M44 7363372-320-22007-23346 51-820)
<220>
<221> VARIANT
<222> (1)...(257)
<223> Xaa = Any Amino Acid
<400> 2336
Leu Leu Phe Val Val Lys Met Lys Arg Leu Gln Thr Cys Xaa Phe Xaa
                                    10
Gln Pro Ala Leu Leu Arg Gly Leu Ser Ser Leu Lys Gly Gln Arg Asp
Pro Arg Leu Asn Glu Cys Cys Met Pro Leu Leu Xaa Gln Asp Pro Arg
                            40
```

75

60

Gly Lys Ala Ser Phe Leu Val Cys Leu Val Leu Val Thr Leu Ser Cys

Met Trp Gln Glu Gln Cys Pro Pro Met His Val Thr Phe Val His Ser

55

```
Leu Ala Val Arg Gln Leu Lys Val Ile Asn Ser Arg Ala Ala Cys Val
                85
                                    90
Leu Arg Ser Ala Glu Leu Xaa Ala Thr Gly Ala Thr Tyr Pro Leu Ser
            100
                                105
                                                    110
Thr Asn Tyr Cys Ile Cys Lys Thr Arg Thr Ser Ala Arg Ala Asp Ile
                            120
Ser Ile Asn Val Ile Ser Ile Gly Val Glu Leu Gly Val Pro Val Leu
                        135
                                            140
Phe Ile Phe Ile Ser Tyr Ile Phe Ile Leu Ser Thr Ile Leu Gly Ile
                   150
                                       155
Pro Ser Ala Glu Gly Arg Lys Lys Ala Phe Ser Thr Cys Ser Ala His
               165
                                   170
Leu Thr Met Val Ile Ile Phe Tyr Gly Thr Ile Leu Phe Met Tyr Gly
                               185
           180
Lys Pro Lys Ser Lys Asp Pro Leu Gly Ala Asp Lys Gln Asp Leu Ala
                           200
Asp Lys Leu Ile Ser Leu Phe Tyr Gly Val Val Thr Pro Met Leu Asn
                       215
                                            220
Leu Arg Thr Thr Val Arg Ala Phe Ile Phe Arg Lys Tyr Phe Ser Gln
                230
                                       235
Xaa Trp Trp Gln Gly Met Leu Trp Thr Val Thr His Arg Thr Glu Lys
                                   250
```

<210> 2337

<211> 321

<212> PRT

<213> Mus musculus (M45 7363372-320-7359-9353 512-1474)

<220>

<221> VARIANT

<222> (1)...(321)

<223> Xaa = Any Amino Acid

<400> 2337

Asp Ser Met Glu Ile Asn Asn Gln Thr Ser Phe Pro Val Ser Ser Phe 10 Ile Leu Leu Gly Leu Ser Ala His Pro Lys Leu Glu Lys Thr Phe Phe 20 Met Leu Ile Leu Leu Met Tyr Leu Val Ile Leu Leu Gly Asn Gly Ile 40 Leu Ile Leu Val Ser Ile Leu Asp Ser His Leu His Thr Pro Met Tyr 55 60 Phe Phe Leu Gly Asn Leu Ser Phe Leu Asp Ile Cys Tyr Thr Thr Ser 70 75 Ser Val Pro Leu Ile Leu Asp Ser Phe Leu Thr Pro Arg Lys Thr Ile 85 9.0 Ser Phe Ser Gly Cys Ala Val Gln Met Phe Leu Ser Phe Ala Met Gly 100 105 110 Ala Thr Glu Cys Val Leu Leu Ser Met Met Ala Phe Asp Arg Tyr Val 115 120 125 Ala Ile Cys Asn Pro Leu Arg Tyr Pro Val Val Met Asn Lys Ala Ala 135 140 Tyr Val Pro Met Ala Val Ser Ser Trp Ser Gly Gly Ile Ala Val Ser 155 Val Val Gln Thr Ser Leu Ala Met Lys Leu Thr Phe Cys Gly Asp Asn 165 170 Val Ile Asn His Phe Thr Cys Glu Ile Leu Ala Val Leu Lys Leu Ala 185 Cys Ala Asp Ile Ser Ile Asn Val Ile Ser Met Gly Val Thr Asn Ile

```
200
                                                 205
 Ile Phe Leu Gly Val Pro Val Leu Phe Ile Ser Phe Ser Tyr Val Phe
                        215
                                            220
 Ile Leu Val Thr Ile Leu Arg Ile Pro Ser Ala Glu Gly Arg Lys Lys
                    230
                                        235
 Ala Phe Ser Thr Cys Ser Ala His Leu Thr Val Val Leu Val Phe Tyr
                245
                                    250
 Gly Thr Ile Leu Phe Met Tyr Gly Lys Pro Lys Ser Lys Asp Pro Leu
                                265
 Gly Ala Asp Lys Gln Asp Leu Ala Asp Xaa Leu Ile Ser Leu Phe Tyr
        275
                            280
 Gly Val Leu Thr Pro Met Leu Asn Pro Ile Ile Tyr Ser Leu Arg Asn
                        295
 Lys Asp Val Arg Ala Ala Val Thr Asn Leu Val Val Leu Lys Lys Ser
                    310
                                        315
 Phe
<210> 2338
<211> 300
<212> PRT
<213> Mus musculus (M50 8075174-14-7636-10544 2097-1198)
<220>
<221> VARIANT
<222> (1)...(300)
<223> Xaa = Any Amino Acid
<400> 2338
Gln Asp Leu Val Ala Thr Gly Val Ile Gly Ala Val Leu Ser Thr Met
                                    10
Gly Val Val Gly Val Val Gly Asn Val Tyr Thr Leu Val Val Met Cys
                                25
Arg Phe Leu Arg Ala Ser Ala Ser Met Tyr Val Tyr Val Val Asn Leu
                            40
Ala Leu Ala Asp Leu Leu Tyr Leu Leu Ser Ile Pro Phe Ile Val Ala
                        55
Thr Tyr Val Thr Lys Asp Trp His Phe Gly Asp Val Gly Cys Arg Val
                    70
                                        75
Leu Phe Ser Leu Asp Phe Leu Thr Met His Ala Ser Ile Phe Thr Leu
               85
                                    90
Thr Ile Met Ser Ser Glu Arg Tyr Ala Ala Val Leu Arg Pro Leu Asp
                                105
Thr Val Gln Arg Ser Lys Gly Tyr Arg Lys Leu Leu Ala Leu Gly Thr
                            120
                                                125
Cys Cys-Trp His-Cys Cys Xaa Pro Tyr Pro Xaa Cys Tyr Ala Ile Arg
                        135
                                            140
Leu Val Arg Arg Gly Ser Lys Ser Leu Cys Leu Pro Ala Trp Gly Pro
                    150
                                        155
Arg Ala His Arg Thr Tyr Leu Thr Leu Leu Phe Gly Thr Ser Ile Val
                165
                                    170
Gly Pro Gly Leu Val Ile Gly Leu Leu Tyr Ile Arg Leu Ala Arg Ala
                                185
Tyr Trp Leu Ser Gln Gln Ala Ser Phe Lys Gln Thr Arg Arg Leu Pro
                            200
                                                205
Asn Pro Arg Val Leu Tyr Leu Ile Leu Gly Ile Val Leu Leu Phe Trp
                       215
                                            220
Ala Cys Phe Leu Pro Phe Val Ala Met Ala Ala Ala Gly Pro Val Pro
                                       235
Pro Gly His Ala Thr Asp Thr Arg Ala Ala Arg Ile Ile Asn Tyr Leu
                                   250
```

Thr Ala Cys Leu Thr Tyr Gly Asn Ser Cys Ile Asn Pro Phe Leu Tyr 265 Thr Leu Leu Thr Lys Asn Tyr Arg Glu Tyr Leu Arg Gly Arg Gln Arg 280 Ser Leu Gly Ser Ser Cys Arg Gly Pro Gly Ser Ala 295 <210> 2339 <211> 340 <212> PRT <213> Mus musculus (M51 8076974-22-383-3835 1573-554) <220> <221> VARIANT <222> (1)...(340) <223> Xaa = Any Amino Acid <400> 2339 Cys Leu Phe Phe Pro Gln Arg Asn Leu Asp Ala Met Asn Arg Ser Ala 1 5 10 Ala His Val Thr Glu Phe Val Leu Leu Gly Phe Pro Gly Ser Trp Lys 25 Ile Gln Ile Phe Leu Phe Val Leu Phe Leu Val Phe Tyr Val Leu Thr 45 35 40 Leu Leu Gly Asn Gly Ala Ile Ile Cys Ala Val Arg Cys Asp Ser Arg 55 Leu His Thr Pro Met Tyr Phe Leu Leu Gly Asn Phe Ala Phe Leu Glu 70 75 Ile Trp Tyr Val Ser Ser Thr Ile Pro Asn Ile Leu Ala Asn Ile Leu 85 90 Ser Lys Thr Lys Ala Ile Ser Phe Ser Gly Cys Phe Leu Gln Phe Tyr 105 110 100 Phe Phe Phe Ser Leu Gly Thr Thr Glu Cys Leu Phe Leu Ala Val Met 125 120 Ala Tyr Asp Arg Tyr Leu Ala Ile Cys Arg Pro Leu His Tyr Pro Thr 135 130 Ile Met Thr Arg Arg Leu Cys Cys Ile Leu Val Ser Ser Cys Trp Leu 155 150 Ile Gly Phe Leu Gly Tyr Pro Ile Pro Ile Phe Ser Ile Ser Gln Leu 170 165 Pro Phe Cys Gly Ser Asn Ile Ile Asp His Phe Leu Cys Asp Met Asp 180 185 190 Pro Leu Met Ala Leu Ser Cys Ala Pro Ala Pro Ile Thr Glu Phe Ile 200 Phe Tyr Ala Gln Ser Ser Phe Val Leu Phe Phe Thr Ile Ala Tyr Ile 220 210 215 Leu Arg Ser Tyr Ile Leu Leu Leu Arg Ala Val Phe Gln Val Pro Ser 235 230 . Ala Ala Gly Arg Arg Lys Ala Phe Ser Thr Cys Gly Ser His Leu Val 250 245 Val Val Ser Leu Phe Tyr Gly Thr Val Met Val Met Tyr Val Ser Pro 270 260 265 Thr Tyr Gly Ile Pro Ile Leu Met Gln Lys Ile Leu Thr Leu Val Tyr 280 285 275 Ser Val Met Thr Pro Leu Phe Asn Pro Leu Ile Tyr Ser Leu Arg Asn 300 295 Lys Asp Met Lys Leu Ala Leu Arg Asn Val Leu Leu Gly Met Arg Ile 310 315 Val Lys Asn Met Xaa Val Lys Ala Val Ser Tyr Ser His Val Leu Ile 325 Lys Asn Lys Leu

340

```
<210> 2340
<211> 325
<212> PRT
<213> Mus musculus (M57 8218295-1-14626-16881 1501-527)
<220>
<221> VARIANT
<222> (1)...(325)
<223> Xaa = Any Amino Acid
<400> 2340
Cys Pro Phe Leu Xaa Val Met Ser Asn Gln Thr Ser Val Thr Glu Phe
                                    10
Leu Leu Leu Gly Val Thr Asp Ile Gln Glu Leu Asn Pro Ile Leu Phe
                                25
           20
Val Ile Phe Phe Thr Ile Tyr Phe Val Asn Ile Thr Gly Asn Gly Ala
                                                45
                            40
Ile Leu Met Ile Val Ile Leu Asp Pro Arg Leu His Ser Pro Met Tyr
                                            60
                        55
Phe Phe Leu Gly Asn Leu Ala Cys Leu Asp Ile Cys Phe Ser Thr Val
                                        75
                   70
Thr Leu Pro Lys Met Leu Gln Asn Leu Leu Ser Thr Asn Lys Ala Ile
                                    90
                85
Ser Phe Leu Gly Cys Ile Thr Gln Leu His Phe Phe His Phe Leu Gly
                                105
                                                   110
            100
Ser Thr Glu Ala Met Leu Leu Pro Val Met Ala Phe Asp Arg Phe Val
                                                125
                            120
Ala Ile Cys Arg Pro Leu His Tyr Ser Val Ile Met Asn His Gln Leu
                                           140
                       135
Cys Ile His Met Thr Val Thr Ile Trp Thr Leu Gly Phe Phe His Ala
                                       155
                   150
Leu Leu His Ser Val Met Thr Ser Arg Leu Ser Phe Cys Gly Pro Asn
                                    170
                165
His Val His His Phe Cys Asp Ile Lys Pro Leu Leu Asp Leu Ala
                                                   190
            180
                                185
Cys Gly Asn Thr Glu Leu Asn Leu Trp Leu Leu Asn Thr Val Thr Gly
                                                205
                            200
Thr Ile Ala Leu Thr Pro Phe Phe Leu Thr Phe Leu Ser Tyr Phe Tyr
                                           220
                        215
Ile Ile Thr Tyr Leu Phe Leu Lys Thr Arg Ser Cys Ser Met Leu His
                                       235
                    230
Lys Ala Leu Ser Thr Cys Ala Ser His Phe Met Val Val Ile Leu Leu
                                   250
                245
Tyr Val Pro Val Leu Phe Thr Tyr Ile Arg Pro Ala Ser Gly Ser Ser
                                                    270
                               265
            260
Leu Asp Gln Asp Arg Ile Ile Ala Ile Met Tyr Ser Val Val Thr Pro
                                                285
                            280
Ala Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Lys Glu Val Arg Ser
                        295
                                           300
Ala Leu Asn Arg Lys Val Arg Arg Trp Leu Xaa Phe Glu Glu Ile Xaa
                                       315
Ile Thr Leu Leu Trp
                325
<210> 2341
<211> 177
<212> PRT
<213> Mus musculus (M63 8218295-1-78460-79066 2-526)
```

```
<220>
 <221> VARIANT
 <222> (1)...(177)
 <223> Xaa = Any Amino Acid
 <400> 2341
 Val Ser Ala His Val Cys Met Gly Cys Xaa Leu Ser Trp Pro Val Arg
                5
                                    10
 Cys Glu Ile Ile Phe Gly Val Met His Thr Thr Val Asn Phe Ser Ile
                                 25
 Val Leu Cys Gly Thr Ser Val Ile His Xaa Phe Cys Asp Val Leu Leu
        35
                            40
                                                45
 Val Leu Lys Leu Ser Cys Leu Tyr Asp His Val Ser Glu Ile Ala Ile
                        55
 Ser Asp Phe Ser Ile Ser Leu Ala Phe Phe Cys Phe Ile Ser Pro Asn
                    70
                                         75
Phe Thr Tyr Val His Ile Phe Ser Thr Glu Leu Arg Met Pro Phe Val
                                     90
Glu Gly Lys Thr Ser Val Phe Ser Thr Cys Leu Cys His Met Thr Ser
            100
                                 105
Ile Leu Phe Ile Pro Thr Gly Ile Phe Glu Phe Leu Arg Ser His Thr
                            120
                                                125
Glu Ser Ser Thr Ser Leu Asp Phe Ile Leu Asn Phe Ser Tyr Phe Ser
                        135
                                            140
Leu Ser Thr Leu Asn Pro Gly Ile Tyr Ser Leu Arg Asn Glu Ala Val
                   150
                                        155
Asp Thr Val Gln Arg Lys Ile Phe Phe Phe Lys Glu Lys Tyr Leu Phe
                165
                                    170
Leu
<210> 2342
<211> 314
<212> PRT
<213> Mus musculus (M65 8218295-1-89089-90071 35-969)
<220>
<221> VARIANT
<222> (1)...(314)
<223> Xaa = Any Amino Acid
<400> 2342
Ser Leu Phe Tyr Ser Gln Arg Ser Arg Met Asn Val Ala Asn Phe Thr
                5
                                    10
Ala Met Thr Ile Phe Leu Leu Met Gly Phe Ser Arg Asn Ser Gln
                                25
                                                    30
Val Glu Ile Ile Phe Ser Thr Leu Ala Leu Val Val Leu Ile Gly Thr
                            40
Ile Ser Ile Val Ala Val Thr Ser Leu Ser Ile Arg Leu Cys Ser Leu
                        55
                                            60
Met Pro Phe Leu Leu Ile His Leu Phe Cys Phe Asp Val Cys Tyr Ile
                    70
                                        75
Ser Val Met Met Pro Lys Ser Val Cys Ser Ser Phe Met Tyr Ser Ala
                                    90
Tyr Ile Ser Leu Ile Glu Cys Thr Leu Gln Val Phe Tyr Ser Gln Ser
                                105
Ser Tyr Thr Ala Met Ala Ile Leu Thr Val Met Ser Tyr Asp Cys Tyr
       115
                            120
                                                125
Met Ala Val Trp His Lys Val Ile Thr Asn Val Ser Thr Cys Ile His
                        135
                                            140
Gly Val Leu Ala Val Leu Val Asn Gly Cys Glu Ile Ile Phe Gly Val
```

```
150
                                        155
Met His Thr Thr Leu Thr Phe Ser Ile Tyr Ile Cys Gly Thr Ser Thr
                165
                                    170
Ile Arg Xaa Phe Cys Asp Val Leu Leu Val Leu Lys Leu Ser Phe Thr
            180
                                185
                                                    190
Asn Asp His Val Asn Glu Leu Glu Ser Leu Ala Phe Ser Ser Val Glu
        195
                            200
                                                205
Gly Arg Thr Lys Ser Phe Ser Thr Cys Leu Gly His Val Ser Val Gly
                       215
                                            220
Ser Leu Phe Asn Pro Pro Gly Val Phe Glu Phe Leu Asn Pro Tyr Ser
                    230
                                        235
Glu Ser Pro Thr Ser Leu Asp Ile Ile Val Thr Val Phe Ile Leu Pro
                245
                                    250
Gln Thr Leu Ser Val Glu Ile Tyr Ser Leu Ser Asn Glu Ala Ile Asp
            260
                                265
                                                    270
Thr Ala Xaa Arg Lys Phe Phe Gln Arg Lys Thr Ser Leu Ser Ile
                            280
                                                285
Leu His Tyr Phe Leu Leu Gly Ser His Ile Xaa Xaa Val Leu Arg Lys
                       295
Thr Thr Val Ser Met Asn Gln Leu Lys Leu
                   310
<210> 2343
<211> 335
<212> PRT
<213> Mus musculus (M70 8439670-95-9581-11872 695-1697)
<220>
<221> VARIANT
<222> (1)...(335)
<223> Xaa = Any Amino Acid
<400> 2343
His Asp His Pro Ser Ala Glu Val Gly Gly Ala Met Ala Asn Ser Thr
                                    10
Thr Val Thr Glu Phe Ile Leu Leu Gly Leu Ser Asp Ala Cys Glu Leu
                                25
Gln Val Leu Ile Phe Leu Gly Phe Leu Leu Thr Tyr Phe Leu Ile Leu
                            40
Leu Gly Asn Phe Leu Ile Ile Phe Ile Thr Leu Val Asp Arg Arg Leu
                        55
Tyr Thr Pro Met Tyr Tyr Phe Leu Arg Asn Phe Ala Met Leu Glu Ile
                    70
                                        75
Trp Phe Thr Ser Val Ile Phe Pro Lys Met Leu Thr Asn Ile Ile Thr
                85
                                    90
Gly His Lys Thr Ile Ser Leu Leu Gly Cys Phe Leu Gln Ala Phe Leu
            100
                                105
Tyr Phe Phe Leu Gly Thr Thr Glu Phe Phe Leu Leu Ala Val Met Ser
        115
                            120
Phe Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu Arg Tyr Ala Thr Ile
                        135
                                            140
Met Ser Lys Arg Val Cys Val Gln Leu Val Phe Cys Ser Trp Met Ser
                    150
                                        155
Gly Leu Leu Ile Ile Val Pro Ser Ser Ile Val Phe Gln Pro
                165
                                    170
Phe Cys Gly Pro Asn Ile Ile Asn His Phe Phe Cys Asp Asn Phe Pro
                                185
Leu Met Glu Leu Ile Cys Ala Asp Thr Ser Leu Val Glu Phe Leu Gly
       195
                           200
                                                205
Phe Val Ile Ala Asn Phe Ser Leu Leu Gly Thr Leu Ala Val Thr Ala
    210
                        215
                                            220
```

```
Thr Cys Tyr Gly His Ile Leu Tyr Thr Ile Leu His Ile Pro Ser Ala
                     230
                                        235
 Lys Glu Arg Lys Lys Ala Phe Ser Thr Cys Ser Ser His Ile Ile Val
                                     250
                245
 Val Ser Leu Phe Tyr Gly Ser Cys Ile Phe Met Tyr Val Arg Ser Gly
                                265
            260
 Lys Asn Gly Gln Gly Glu Asp His Asn Lys Val Val Ala Leu Leu Asn
                            280
 Thr Val Val Thr Pro Thr Leu Asn Pro Phe Ile Tyr Thr Leu Arg Asn
                        295
                                            300
 Lys Gln Val Lys Gln Val Phe Arg Glu His Val Ser Lys Phe Gln Lys
                    310
                                        315
 Phe Ser Gln Thr Xaa Arg Lys Ala Pro Leu Gln Thr Cys Leu Thr
                                    330
<210> 2344
<211> 139
 <212> PRT
<213> Mus musculus (M71 8439670-97-10488-11856 213-627)
<220>
<221> VARIANT
<222> (1)...(139)
<223> Xaa = Any Amino Acid
<400> 2344
Ser Ile Val Cys Ser Leu Ser Leu Ser Phe Phe Leu Ser Phe Phe Leu
                 5
                                    10
Ser Phe Phe Leu Ser Phe Phe Leu Ser Phe Phe Leu Ser Phe Ser Leu
            20
                                25
Ser Leu Ser Leu Ser Leu Ser Phe Phe Leu Ser Phe Phe Leu
                            40
                                                45
Ser Phe Phe Leu Ser Phe Phe Leu Ser Phe Leu Pro Thr Phe Pro Pro
                        55
                                            60
Ser Leu Phe Leu Ser Phe Phe Leu Ser Phe Phe Leu Ser Phe Phe Leu
                    70
                                        75
Ser Phe Phe Leu Ser Phe Phe Leu Ser Phe Phe Leu Ser Phe Phe Leu
               85
                                    90
Ser Phe Phe Leu Ser Ser Leu Ser Phe Leu Ser Phe Tyr Ile Tyr Xaa
                                105
Trp Leu Val Cys Gly Pro Leu Pro Ser Xaa Gly Thr Val Gly Lys Gln
                           120
Ser Cys Val Met Met Leu Ile Cys Ser Trp Leu
 .. 130
<210> 2345
<211> 331
<212> PRT
<213> Mus musculus (M72 8439916-11-1-1677 434-1425)
<220>
<221> VARIANT
<222> (1) ... (331)
<223> Xaa = Any Amino Acid
Phe Leu Leu Ala Trp Val His Arg Phe Leu Xaa Arg Arg Met Gly Phe
                                    10
Glu Asn Gly Ser Ser Val Thr Glu Phe Ile Leu Val Gly Leu Thr Lys
            20
                                25
Glu Ser Asp Leu Gln Cys Pro Leu Phe Ile Leu Phe Leu Met Met Tyr
```

```
40
                                                45
        35
Val Val Thr Val Leu Gly Asn Gln Gly Leu Ile Ser Leu Ile Gly Leu
                        55
Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Phe Asn Leu Ser
                    70
                                        75
Phe Val Asp Leu Trp Tyr Ser Ser Val Phe Thr Pro Lys Met Leu Glu
                85
                                    90
Ser Phe Ile Ser Glu Lys Asn Thr Ile Ser Tyr Arg Gly Cys Met Ala
            100
                                105
                                                    110
Gln Leu Phe Phe Cys Phe Phe Ser Ile Ser Glu Cys Tyr Ile Leu
                            120
                                                125
Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu Leu
                        135
                                            140
Tyr Asn Ile Val Met Ser Pro Lys Gln Cys Leu Ile Leu Met Phe Ser
                    150
                                        155
Ser Tyr Met Met Ala Phe Ser Gly Ala Met Ala His Thr Gly Cys Met
                165
                                    170
                                                        175
Leu Arg Leu Thr Phe Cys Asp Ala Asn Thr Ile Asn His Tyr Phe Cys
            180
                               185
                                                    190
Asp Ile Leu Pro Leu Leu Gln Leu Ser Cys Thr Ser Thr Tyr Val Asn
                           200
                                                205
Glu Leu Glu Val Phe Val Val Val Gly Ile Asn Ile Ile Val Pro Thr
                       215
                                           220
Ile Thr Ile Phe Ile Ser Tyr Gly Phe Ile Ile Ala Ser Ile Phe Arg
                   230
                                        235
Ile Ser Ser Lys Glu Asp Arg Ser Lys Ala Phe Ser Thr Cys Ser Ser
               245
                                   250
His Ile Ile Ala Val Ser Leu Phe Phe Gly Ser Gly Ala Phe Met Tyr
           260
                               265
                                                    270
Leu Lys Pro Ser Ser Ala Glu Ser Met Asn Glu Gly Lys Ile Ser Ser
       275
                           280
                                                285
Ile Phe Tyr Thr Asn Thr Val Pro Leu Leu Asn Pro Leu Ile Tyr Ser
                        295
                                            300
Leu Arg Asn Lys Asp Val Lys Asp Ala Leu Ile Lys Thr Leu Ser Lys
                   310
                                        315
Arg Lys Arg Xaa Asn Glu Pro Ser Val Leu Pro
               325
<210> 2346
<211> 333
<212> PRT
<213> Mus musculus (M73 8439916-12-562-4356 2317-1320)
<220>
<221> VARIANT
<222> =(1) ... (333) ==
<223> Xaa = Any Amino Acid
<400> 2346
Ile Ser Leu Ile Ser Phe Ile Ser Thr Asp Ser Thr Xaa Arg Arg Met
                5
                                   10
Val Val Thr Asn Gly Ser Leu Val Thr Glu Phe Ile Leu Leu Gly Leu
           20
                                25
Thr Asp Asn Pro Asp Leu Gln Ile Pro Leu Phe Leu Val Phe Leu Val
                            40
                                                45
Met Tyr Met Ile Thr Ala Phe Gly Asn Leu Thr Leu Ile Leu Leu Thr
                       55
                                            60
Val Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Phe Asn
                                       75
                   70
Leu Ser Phe Ile Asp Leu Cys Tyr Ser Ser Val Val Thr Pro Lys Leu
                                    90
```

```
Leu Met Asn Phe Val Leu Lys Lys Asn Ile Ile Gly Phe Ala Gly Cys
                               105
           100
Met Thr Gln Leu Tyr Phe Phe Cys Phe Phe Val Ile Ser Glu Cys Tyr
                                                125
                           120
       115
Val Leu Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro
                                           140
                       135
Leu Met Tyr Asn Val Thr Met Ser Pro Lys Val Cys Ser Tyr Leu Met
                                       155
                   150
Leu Gly Ser Tyr Leu Met Gly Phe Ser Asp Ala Met Ile His Thr Gly
                                   170
              165
Cys Ile Leu Arg Leu Thr Phe Cys Asp Gly Asn Thr Ile Asn His Tyr
                               185
Phe Cys Asp Leu Leu Pro Leu Met Gln Leu Ser Cys Thr Ser Thr Tyr
                                               205
                          200
Ile Asn Glu Val Glu Ile Phe Ile Val Gly Gly Lys Asp Ile Thr Val
                                            220
                       215
Pro Ser Ile Val Ile Ile Ser Tyr Gly Phe Ile Leu Ser Asn Ile
                                       235
                   230
225
Leu Gln Ile Lys Ser Thr Gly Gly Arg Ser Lys Ala Phe Asn Thr Cys
                                   250
               245
Ser Ser His Ile Ile Ala Val Ser Leu Phe Phe Gly Ser Cys Ala Phe
                                                   270
                               265
           260
Met Tyr Leu Lys Pro Pro Ser Ala Gly Ser Leu Asn Glu Gly Lys Val
                           280
       275
Ser Ser Val Phe Tyr Thr Ile Val Val Pro Met Met Asn Pro Leu Ile
                       295
                                           300
Tyr Ser Leu Arg Asn Lys Asp Val Lys Leu Ala Leu Arg Lys Thr Leu
                  310
                                   315
Ser Arg Arg Lys Phe Xaa Xaa Xaa Ile Tyr Tyr Leu Cys
               325
<210> 2347
<211> 343
<212> PRT
<213> Mus musculus (M74 8439916-15-1-3070 860-1887)
<220>
<221> VARIANT
<222> (1)...(343)
<223> Xaa = Any Amino Acid
<400> 2347
Phe Ser Phe Ile Phe Phe Val Ser Thr Asp Ser Leu Arg Glu Asp Met
                                    10
Thr Phe Glu Asn Ala Ser Met Val Ile Glu Phe Ile Leu Leu Gly Ile
                                                   30
           20
                               25
Thr Asp Gln Pro Asp Leu Lys Ile Pro Phe Phe Leu Leu Phe Phe Val
                           40
Gly Tyr Met Ile Thr Val Leu Gly Asn Leu Thr Leu Ile Ile Leu Ile
                                            60
                       55
Gly Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Leu Leu Phe Asn
                   70
                                       75
Leu Ser Phe Ile Asp Leu Cys Tyr Ser Ser Val Ile Thr Pro Lys Met
                                   90
               85
Leu Met Ser Phe Ile Gln Lys Lys Asn Ile Ile Ser Tyr Thr Gly Cys
                               105
           100
Met Ile Gln Leu Tyr Phe Phe Cys Phe Phe Val Ile Ser Glu Cys Tyr
                           120
                                                125
Val Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro
                       135
                                           140
```

Leu Leu Tyr Asn Val Thr Leu Ser Ser Lys Val Cys Cys Tyr Leu Met

```
150
                                       155
Leu Gly Ser Tyr Phe Met Gly Phe Ser Gly Ala Met Ile His Thr Gly
               165
                                   170
Cys Ile Leu Arg Leu Thr Phe Cys Asp Gly Asn Thr Ile Asn His Tyr
                               185
           180
Phe Cys Asp Leu Leu Pro Leu Leu Gln Ile Ser Cys Thr Ser Thr Tyr
                           200
Ile Asn Glu Ile Glu Leu Phe Ile Val Ala Gly Lys Asp Ile Ile Val
                       215
                                           220
Pro Thr Ile Ile Ile Phe Ile Ser Tyr Gly Phe Ile Leu Phe Ser Val
                                       235
                    230
Leu Lys Ile Lys Ser Thr Glu Ser Arg Ser Lys Ala Phe Ser Thr Cys
                                   250
Ser Ser His Met Leu Ala Val Ser Leu Phe Phe Gly Ser Gly Ala Phe
                               265
                                                   270
Met Tyr Leu Lys Pro Thr Ser Ala Leu Ser Ile Asn Lys Gly Lys Phe
                           280
                                              285
Ser Ser Leu Phe Tyr Thr Ile Val Val Pro Met Met Asn Pro Leu Ile
                    295
                                            300
Tyr Ser Leu Arg Asn Lys Asp Val Lys Ala Ala Leu Arg Lys Thr Leu
                   310
                                       315
Asn Arg Arg Ile Phe Ser Ser Xaa Thr Gly Tyr Leu Xaa Ala Tyr Thr
                                   330
               325
Xaa Thr Ile Glu Arg Leu Cys
<210> 2348
<211> 321
<212> PRT
<213> Mus musculus (M75 8439916-16-717-3690 2556-1594)
<220>
<221> VARIANT
<222> (1)...(321)
<223> Xaa = Any Amino Acid
<400> 2348
Lys Lys Met Ala Ser Ala Asn Val Ser Leu Val Thr Glu Phe Ile Leu
                                    10
Val Gly Leu Thr Asn Gln Pro Asp Leu Gln Ile Pro Leu Phe Phe Val
           20
                                25
Phe Leu Ile Met Tyr Ile Val Thr Ala Leu Gly Asn Leu Cys Leu Ile
                           40
Ile Leu Ile Val Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe
                        55
                                            60
Leu Phe Asn Leu Ser Phe Ile Asp Leu Cys Tyr Ser Thr Val Phe Thr
                    70
                                        75
Pro Lys Met Leu Met Asn Phe Ile Leu Ser Lys Asn Ala Ile Ser Tyr
                                    90
Met Gly Cys Leu Thr Gln Leu Tyr Phe Phe Cys Phe Phe Val Ile Ser
            100
                                105
Glu Cys Tyr Val Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile
       115
                            120
                                               125
Cys Asn Pro Leu Leu Tyr Thr Val Ala Met Ser Pro Lys Leu Cys Leu
                        135
                                            140
Asn Leu Met Leu Gly Thr Tyr Ala Met Ala Phe Ser Gly Ala Met Ala
                                       155
                    150
His Thr Gly Cys Met Leu Arg Leu Thr Phe Cys Asp Ala Asn Thr Ile
                                   170
               165
Asn His Tyr Phe Cys Asp Ile Leu Pro Val Met Gln Leu Ser Cys Thr
                               185
```

```
Ser Thr Tyr Val Asn Glu Leu Val Val Phe Ile Val Val Gly Ile Asn
                             200
        195
 Ile Ile Val Pro Ser Ile Thr Ile Phe Ile Ser Tyr Gly Phe Ile Leu
                        215
                                             220
 Ser Ser Ile Phe His Ile Lys Ser Asn Glu Gly Arg Ser Lys Ala Phe
                    230
                                         235
 Ser Thr Cys Ser Ser His Ile Ile Ala Val Cys Leu Phe Phe Gly Ser
                245
                                     250
                                                        255
 Gly Ala Phe Met Tyr Leu Lys Pro Ser Ser Ser Ser Met Asp Gln
            260
                                265
                                                    270
 Gly Lys Thr Ser Ser Val Phe Tyr Thr Asn Val Val Pro Met Met Asn
                            280
                                                285
 Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Ile Ala Leu Arg
                       295
Lys Thr Leu Ser Arg Trp Lys Phe Xaa Lys Glu Thr Thr Cys Thr Cys
305
                   310
                                        315
Leu
<210> 2349
<211> 217
<212> PRT
<213> Mus musculus (M76 8439916-16-8665-10443 1774-1125)
<220>
<221> VARIANT
<222> (1)...(217)
<223> Xaa = Any Amino Acid
<400> 2349
Phe Leu Thr Phe Leu Pro Leu Leu Pro Phe Leu Ser Phe Phe Leu Ser
                5
                                    10
Phe Phe Leu Ser Phe Phe Leu Ser Phe Phe Leu Ser Phe Ser Glu Cys
            20
                                25
Cys Val Leu Thr Ser Met Ala Tyr Asp Ser Ile Cys Asn Pro Leu Leu
                            40
Tyr Asn Leu Phe Met Ser Pro Lys Xaa Cys Leu Asn Leu Ile Leu Gly
                        55
Ser Phe Phe Ile Ser Phe Ser Asp Ala Val Ala His Ser Thr Cys Arg
                    70
                                        75
Leu Lys Leu Thr Phe Cys Asp Cys Asp Ile Pro Pro Leu Leu Gln Leu
                85
                                    90
Cys Cys Thr Ser Thr Tyr Val Asn Glu Leu Val Ile Phe Phe Val Val
                               105
                                                   110
Gly Cys Ile Asn Ile Ile Val Pro Ser Ser Thr Ile Leu Ile Ser Tyr
       115
                           120
Asp Phe Ile Leu Ser Ser Met Phe Cys Ile Lys Ser Ser Glu Gly Arg
                        135
                                            140
Ser Lys Ala Phe Ser Thr Tyr Ser Ser His Val Ile Ser Leu Ser Leu
                   150
                                        155
Phe Phe Asp Ser Ser Ala Phe Val Tyr Phe Lys Ser Ser Ser Ala Gly
               165
                                    170
Ser Leu Gly Glu Glu Asn Ile Ser Ser Val Phe Tyr Ser Asn Val Val
                                185
                                                    190
Leu Ile Val Asn Pro Leu Leu Tyr Ser Leu Arg Asn Lys Asp Ser Leu
                            200
                                                205
Arg Lys Thr Leu Thr Arg Lys Asn Phe
   210
                       215
<210> 2350
<211> 333
```

```
<212> PRT
<213> Mus musculus (M77 8439916-17-1-2001 619-1618)
<220>
<221> VARIANT
<222> (1)...(333)
<223> Xaa = Any Amino Acid
<400> 2350
Ile Ile Leu Xaa Tyr Asn Ser Phe Phe Leu Ser Leu Xaa Ile Pro Leu
                                    10
Lys Arg Met Asp Ser Val Asn Val Ser Leu Val Thr Glu Phe Leu Leu
            20
                                25
Val Gly Leu Thr His Gln Pro Asp Arg Gln Ile Pro Leu Phe Leu Leu
                            40
Phe Leu Ala Met Tyr Leu Val Thr Ala Leu Gly Asn Leu Gly Leu Ile
                        5.5
Ile Leu Val Leu Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe
                   70
Leu Phe Asn Leu Ser Phe Ile Asp Phe Cys Tyr Ser Ser Val Phe Thr
                85
                                    90
Pro Lys Met Leu Met Asn Phe Ile Leu Arg Gln Asn Ala Ile Ser Tyr
            100
                               105
                                                    110
Met Gln Cys Met Thr Gln Leu Tyr Phe Phe Cys Phe Phe Val Val Ser
        115
                           120
                                                125
Glu Cys Phe Val Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile
                        135
                                            140
Cys Asn Pro Leu Leu Tyr Asn Val Met Ile Ser Pro Gln Val Cys Leu
                    150
                                        155
Asn Leu Met Ile Gly Ser Tyr Leu Met Ala Phe Ser Glu Ala Val Ala
                165
                                    170
Leu Thr Val Cys Met Leu Thr Leu Thr Phe Cys Asp Gly Asn Ile Asn
            180
                                185
His Tyr Phe Cys Asp Ile Leu Ala Leu Phe Gln Leu Ser Cys Ser Ser
                            200
                                                205
Thr Tyr Val Asn Lys Leu Val Ala Tyr Val Ile Val Val Ile Asn Ile
                        215
                                            220
Leu Phe Ser Thr Pro Thr Ile Phe Ile Ser Tyr Gly Phe Ile Leu Ser
                    230
                                        235
Ser Ile Phe Arg Ile Ser Ser Lys Gly Arg Ser Lys Ala Phe Ser
                245
                                    250
Thr Cys Ser Ser His Ile Ile Ala Val Ser Leu Phe Phe Gly Ser Gly
           260
                                265
Ala Phe Val Tyr Phe Lys Pro Ser Ser Pro Gly Ser Met Glu Trp Ala
        275
                           280
                                                285
Lys Ile Ser Ser Val Phe Tyr Thr Asn Val Val Pro Met Met-Asn Pro
                       295
                                            300
Leu Ile Tyr Ser Leu Lys Asn Lys Asp Val Lys Ile Ala Leu Arg Lys
                   310
                                        315
Ser Leu Ala Arg Xaa Arg Phe Asp Trp Ile His Met Tyr
                325
<210> 2351
<211> 299
<212> PRT
<213> Mus musculus (M78 8439916-17-6970-9135 1261-2156)
<220>
<221> VARIANT
<222> (1)...(299)
<223> Xaa = Any Amino Acid
```

```
<400> 2351
 Thr Asp Ser Pro Xaa Arg Arg Met Asp Xaa Val Asn Ile Ser Leu Val
                                     10
 Thr Glu Phe Ile Val Val Gly Xaa Ala Glu Gln Pro Asp Leu Gln Ile
 Pro Met Phe Phe Gly Phe Leu Ala Met Tyr Thr Val Thr Ala Leu Glu
 Asn Leu Phe Leu Ile Ile Leu Thr Val Leu Asn Ser His Val His Thr
 Thr Met Tyr Tyr Phe Leu Phe Asn Leu Ser Phe Val Val Leu Cys Tyr
                    70
                                         75
 Ser Ser Val Phe Thr Pro Gln Met Leu Met Asn Phe Ile Ile Arg Lys
                85
                                     90
 Asn Thr Ile Ser Tyr Met Glu Cys Ile Thr Xaa Leu Phe Phe Leu Ser
                                105
 Phe Phe Leu Ile Phe Leu Cys Phe Phe Leu Ser Ser Phe Phe Leu Ser
                            120
                                                 125
 Phe Phe Ser Phe Phe Leu Ser Phe Phe Leu Ser Phe Phe Leu Ser Phe
                        135
 Phe Leu Ser Ser Phe Leu Pro Ser Leu Leu Pro Ser Phe Leu Ser Phe
                    150
                                        155
Phe Leu Ser Phe Phe Leu Ser Phe Phe Leu Ser Phe Ser Leu Ser Phe
                165
                                    170
Leu Ser Ala Ala Tyr Xaa Leu Gln Cys Ala Met Ile Ser Ile Cys Asn
                                185
Ser Leu Val Tyr Asn Leu Phe Met Arg Pro Xaa Val Leu Ser Glu Pro
        195
                            200
                                                 205
Tyr Ser Trp Val Ile Leu Xaa Phe Ile Tyr Xaa Cys Val Asn Thr Leu
                        215
                                            220
Ser Ser Gly Ile Glu Thr Asp Thr Val Arg Arg Glu Thr Ser Cys Leu
                    230
                                        235
Arg Val Arg Pro Ala Ala Pro Gly His Met Ser Val Ser Leu Glu Phe
                245
                                    250
Phe Phe Cys Ser Gly Arg Val Tyr Leu Trp Gly Leu Pro Gln Thr Glu
           260
                                265
Leu Ile Pro Tyr Ala Xaa Leu Pro Val Gln Arg Pro Pro Val Leu Glu
                           280
Glu Ser Leu Glu Gly Arg Arg Ala Arg Asn Val
    290
                        295
<210> 2352
<211> 339
<213> Mus musculus (M80 8439916-20-13750-16634 2033-1016)
<220>
<221> VARIANT
<222> (1)...(339)
<223> Xaa = Any Amino Acid
<400> 2352
Cys His Ser Phe Phe Leu Leu Leu Ile His Arg Leu Phe Xaa Arg Arg
                 5
                                    10
Met Gly Val Glu Asn Gly Ser Leu Val Thr Glu Phe Ile Leu Gln Gly
                                25
Leu Thr Ser Asp Pro Asp Leu Gln Leu Pro Leu Phe Leu Phe Leu
                                                45
Leu Ile Tyr Thr Thr Thr Ala Leu Gly Asn Leu Ser Leu Ile Thr Leu
                        55
Ile Ala Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Leu
```

```
70
                                        75
Asn Leu Ser Phe Ile Asp Leu Cys Tyr Ser Ser Val Ile Thr Pro Lys
               85
                                   90
Met Leu Met Asn Phe Leu Val Ser Lys Asn Phe Ile Ser Tyr Val Gly
           100
                               105
Cys Met Thr Gln Leu Tyr Leu Phe Val Phe Phe Ala Val Ser Glu Cys
                           120
                                               125
Cys Val Leu Ser Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                       135
                                           140
Pro Leu Leu Tyr Asn Ile Ala Met Ser Pro Gln Val Cys Ser Tyr Leu
                                       155
                   150
Met Leu Gly Ser Tyr Ile Met Gly Phe Ser Gly Ala Met Ile His Thr
                                   170
               165
Gly Trp Met Leu Arg Leu Thr Phe Cys Asp Arg Ser Ile Ile Asn His
                                185
                                                    190
Tyr Phe Cys Asp Leu Leu Pro Leu Leu Gln Leu Ser Cys Thr Asn Thr
                            200
                                                205
Tyr Ala Asn Glu Ile Glu Ile Ile Ile Val Gly Gly Ile Asp Ile Ile
                        215
                                            220
Val Pro Ser Ile Ile Ile Phe Thr Ser Tyr Gly Phe Val Leu Ser Asn
                    230
                                        235
Ile Phe Gln Met Arg Ser Thr Glu Gly Arg Ser Lys Ala Phe Ser Thr
                245
                                    250
Cys Ser Ser His Ile Val Ala Val Ser Leu Phe Phe Gly Ser Gly Ala
            260
                                265
Phe Met Tyr Leu Gln Pro Ser Ser Pro Glu Ser Met Asp Gln Gly Lys
                           280
                                                285
Arg Ser Ser Val Phe Tyr Thr Ile Leu Val Pro Met Met Asn Pro Leu
                       295
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Ile Ala Leu Lys Lys Thr
                  310
Phe Ser Thr Gln Ser Val Xaa Xaa Glu Ile Asn Val Tyr His Tyr Thr
                325
                                    330
Tyr Ala Asn
<210> 2353
<211> 336
<212> PRT
<213> Mus musculus (M82 8439916-21-1-3132 1296-290)
<220>
<221> VARIANT
<222> (1)...(336)
<223> Xaa = Any Amino Acid
<400> 2353
Asn Phe Ile Phe Phe Leu Pro Ile Asp Ser Leu Arg Glu Asp Met Ala
                                   10
Leu Glu Asn Ala Ser Leu Val Thr Glu Phe Ile Leu Met Gly Leu Thr
                               25
Asn Arg Pro Asp Leu Gln Ile Pro Leu Phe Leu Phe Leu Val Met
                           40
Tyr Val Ile Ala Thr Leu Gly Asn Leu Ala Leu Ile Met Leu Ile Ile
                       55
Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Leu Asn Leu
                   70
                                       75
Ser Cys Ile Asp Leu Phe Tyr Cys Ser Val Ile Thr Pro Lys Met Leu
               85
                                   90
Met Asn Phe Val Leu Lys Lys Asn Val Ile Ser Tyr Glu Gly Cys Met
                               105
```

```
Ala Gln Phe Tyr Phe Phe Ala Phe Phe Ala Ile Ser Glu Cys Tyr Val
                            120
Leu Thr Thr Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu
                        135
Leu Tyr Asn Ile Val Met Ser Pro Lys Leu Cys. Ser Tyr Leu Met Met
                    150
                                        155
Gly Thr Tyr Leu Met Gly Phe Ser Gly Ala Met Ile His Thr Gly Cys
                                    170
                165
                                                        175
Ile Leu Arg Leu Thr Phe Cys Asp Lys Asn Thr Ile Asn His Tyr Phe
            180
                               185
                                                   190
Cys Asp Ile Leu Pro Leu Leu Gln Ile Ser Cys Thr Ser Thr Tyr Val
                            200
        195
Asn Glu Ile Glu Leu Phe Ile Val Ala Gly Lys Asp Ile Ile Val Pro
                       215
                                            220
Thr Val Ile Ile Phe Thr Ser Tyr Gly Phe Ile Leu Ser Ser Ile Leu
                   230
                                       235
Lys Ile Ser Ser Thr Ala Gly Met Ser Lys Ala Phe Ser Thr Cys Ser
               245
                                   250
Ser His Ile Ile Ala Leu Cys Leu Phe Phe Gly Ser Cys Thr Phe Met
                               265
            260
                                                    270
Tyr Leu Lys Pro Ser Ser Val Glu Ser Met Asp Gln Gly Lys Ile Ser
        275
                            280
                                                285
Ser Val Phe Tyr Asn Ile Val Val Pro Leu Met Asn Pro Leu Ile Tyr
                        295
Ser Leu Arg Asn Lys Asp Val Lys Ile Ala Ile Lys Lys Thr Ile Thr
                   310
                                        315
Lys Gly Lys Phe Xaa Ser Glu Phe Val Ile Leu Phe Thr Phe Ser Tyr
                325
                                    330
<210> 2354
<211> 316
<212> PRT
<213> Mus musculus (M84 8439916-22-16651-22211 2487-1540)
<400> 2354
Met Ala Leu Ala Asn Gly Ser Phe Val Thr Glu Phe Ile Leu Leu Gly
                                    10
Leu Thr Asp Gln Pro Asp Leu Gln Met Pro Leu Phe Leu Ile Phe Leu
                                25
Ile Ile Tyr Leu Ile Thr Ala Phe Gly Asn Leu Thr Leu Ile Ile Leu
        35
                            40
Ile Val Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Phe
                        55
Asn Leu Ser Phe Ile Asp Leu Cys Tyr Ser Ser Leu Ile Thr Pro Lys
                                        75
Met Leu Met Asn Phe Val Leu Glu Lys Asn Ile Ile Ser Tyr Met Gly
               85
                                    90
Cys Met Thr Gln Phe Tyr Phe Phe Gly Phe Phe Ala Ile Ser Glu Cys
           100
                               105
Tyr Val Leu Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                       • 120
                                               125
Pro Leu Leu Tyr Ser Val Ala Met Ser Pro Lys Met Cys Ser Tyr Phe
                       135
                                            140
Ile Leu Gly Ser Tyr Phe Met Gly Phe Ser Gly Ala Met Ile His Thr
                   150
                                       155
Gly Cys Val Met Arg Leu Thr Phe Cys Asp Gly Asn Thr Ile Asn His
               165
                                   170
Tyr Phe Cys Asp Leu Leu Pro Leu Gln Leu Ser Cys Thr Ser Thr
           180
                               185
                                                   190
Tyr Val Asn Glu Ile Glu Leu Phe Ile Val Thr Gly Lys Asp Ile Ile
                           200
                                                205
```

```
Val Pro Thr Val Ile Ile Phe Ala Ser Tyr Gly Phe Ile Leu Ser Asn
                       215
                                           220
 Ile Leu Lys Ile Arg Ser Thr Ser Gly Arg Ser Lys Ala Phe Ser Thr
                    230
                                        235
 Cys Ser Ser His Ile Ile Ala Val Ser Met Phe Phe Gly Ser Ser Ala
                245
                                    250
 Phe Met Tyr Leu Lys Pro Ser Ser Ala Val Ser Met Asn Glu Ala Lys
            260
                                265
 Phe Ser Ser Ile Phe Tyr Ser Ile Val Val Pro Met Met Asn Pro Leu
                            280
                                                285
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Gly Leu Lys Lys Thr
                     295
Leu Ser Arg Met Phe Ser His Asn Leu Ile Ser Leu
                    310
<210> 2355
<211> 239
<212> PRT
<213> Mus musculus (M90 8567804-15-6071-7402 605-1319)
<220>
<221> VARIANT
<222> (1)...(239)
<223> Xaa = Any Amino Acid
<400> 2355
Asn Thr Glu Gly His Ser Leu Ile Leu Thr Tyr Asn Val Ser Asn Thr
                                    10
Gln Ile Asn Cys Phe Cys Leu Ile Tyr Thr Xaa Tyr Asn Leu Leu Xaa
            20
                                25
Phe Leu Glu Ile Tyr Phe Cys Pro Leu Leu Ile Pro Cys Val Ala Glu
                            40
                                               45
Trp Ser Arg Gly Asp Cys Ile Glu Ile Leu Glu Tyr Asn Ile Cys Ile
Phe Ile Lys Leu Met Val Pro Thr Met Ser Ser Leu His Tyr Leu Met
                   70
                                       75
Asn Ser Ser Val Xaa Tyr Leu Lys Ile Phe His Val Ser Lys Glu Leu
               85
                                    90
Tyr Gly Ser Phe Leu Gly Gly Ile Phe Phe Leu Ala Asn His Cys Arg
           100
                               105
Glu Ile Glu Ile Ser Asn Arg Thr Thr Glu Met Arg Ile Lys Ala Leu
                           120
                                               125.
Gln Lys Gly Leu Arg Asp Ile Ser Phe Ile Thr Asn Ser Val Gly Ile
                        135
                                           140
Val Ile Leu Ile Ile Tyr Ala Arg Leu Gln Lys Ser Thr Glu Gly
                   150
                            -- 155
Thr Val Lys Thr Ser Ser Asn Cys Gly Tyr His Ile Ile Ser Ile Tyr
               165
                                   170
                                                       175
Leu Phe Phe Leu Lys Phe Ala Phe Leu Tyr Ile Phe Lys Tyr Val Ser
           180
                               185
                                                   190
Arg Met His Gln Gly Ser Val Ser Ser Val Phe Tyr Thr Asn Val Val
                           200
                                               205
Pro Ile Cys Asn Thr Leu Ile Tyr Ser Leu Xaa Asn Asp Val Thr Ile
                       215
                                          220
Ala Trp Met Asn Val Leu Met Lys Phe Gln Arg His Leu Phe Tyr
                   230
                                       235
<210> 2356
<211> 202
<212> PRT
<213> Mus musculus (M96 8567804-8-3023-3783 759-153)
```

```
<220>
<221> VARIANT
<222> (1)...(202)
<223> Xaa = Any Amino Acid
<400> 2356
Ile Leu Leu Gly Leu Thr Gln Gln Pro Glu Leu Gln Leu Pro Leu Phe
                                    10
Phe Gln Phe Leu Gly Ile Tyr Val Val Ser Ile Val Gly Asn Leu Gly
            20
                                25
Leu Ile Val Leu Ile Val Leu Asn Pro His Leu His Thr Pro Met Tyr
                            40
Tyr Phe Leu Phe Asn Leu Ser Phe Thr Asp Leu Cys Tyr Ser Ser Ala
                        55
Ile Thr Pro Lys Met Leu Val Gly Phe Val Asn Gln Asn Ile Ile Ala
                    70
His Ala Glu Cys Leu Thr Gln Leu Phe Phe Cys Phe Phe Val Leu
               85
                                    90
Asp Glu Cys Tyr Ile Cys Thr Glu Met Ala Tyr Asp Arg Tyr Ala Ala
                                                    110
            100
                                105
Ile Cys Lys Thr Leu Leu Asn Gln Val Thr Met Ser His Gln Val Cys
                           120
                                                125
Leu Glu Ile Thr Lys Gly Trp Ile Ile Leu Tyr Ser Glu Met Glu Lys
                                            140
                        135
Ser Lys Lys Ser Phe Xaa Met Tyr Ile Ser Ile Leu Leu Phe Phe Ser
                   150
                                       155
Leu Phe Gly Asp Ile Ile Ser Leu Lys Ser Phe Met Leu Ser Lys Cys
                                   170
               165
                                                       175
Leu Thr Thr Asp Leu His Leu Lys Ser Arg His Ile Cys Lys Phe Cys
           180
                               185
Val Ala Val Ser Asp Asn Val Leu Leu Leu
        195
                            200
<210> 2357
<211> 123
<212> PRT
<213> Mus musculus (M98 8570471-14-891-2711 1429-1795)
<220>
<221> VARIANT
<222> (1)...(123)
<223> Xaa = Any Amino Acid
<400> 2357
Leu Cys Gly Ser Gly Thr Leu Ile Phe Ser Ser Glu Met Leu Phe Ile
                                    10
Phe Leu Gly Lys Xaa Phe Phe Gly Xaa Xaa Asp Leu Ile Val Ala Ile
            20
                                25
Phe Cys Ile Phe Asn Phe Leu Lys Leu Ser Leu Leu Thr Lys Val Pro
                           40
Glu Cys Asp Phe Xaa Asn Lys Leu Ser Xaa Xaa Asn Glu Tyr Ile Xaa
                       55
Asn Ile Val Pro Asp Ser Tyr Xaa Tyr Arg Asn Leu Tyr Trp Gly Asn
                   70
                                        75
Gly Asn Met Ser Ser Thr Gly Cys Met Leu Arg Leu Thr Ser Trp Asp
                                    90
Gly Asn Thr Ile Asn His Tyr Phe Cys Asp Leu Leu Pro Phe Leu Gln
                               105
Leu Ser Cys Thr Ser Thr Tyr Val His Tyr Thr
                            120
```

```
<210> 2358
 <211> 179
 <212> PRT
 <213> Mus musculus (M99 8570471-17-1-2939 17-553)
 <220>
 <221> VARIANT
 <222> (1)...(179)
 <223> Xaa = Any Amino Acid
 <400> 2358
 Ile Cys Leu Asn Leu Met Leu Val Ser Tyr Phe Ile Ala Phe Ser Glu
 1
                                     10
 Ser Val Ala His Thr Ala Cys Met Leu Arg Leu Thr Phe Cys Asp Ala
                                                     30
Asn Thr Ile Asn Tyr Tyr Phe Cys Asp Ile Pro Pro Leu Leu Gln Leu
                             40
Ser Cys Thr Thr Arg Val Asn Glu Val Val Ile Phe Val Val Gly
                        55
Ser Ile Asn Ile Ile Ile Pro Thr Ser Thr Ile Phe Val Ser Tyr Gly
                    70
                                         75
Phe Ile Leu Ser Ser Ile Phe Leu Ile Thr Ala Ser Glu Gly Arg Ser
                85
                                     90
Lys Ala Phe Ser Thr Cys Ser Ser His Ile Ile Ala Ala Phe Leu Phe
                                105
Phe Gly Ser Gly Ala Ile Arg Tyr Phe Lys Pro Ser Ser Asp Gly Ser
                            120
                                                125
Met Asp Glu Gly Lys Ile Ser Ser Val Phe Tyr Thr Asn Val Ile Pro
                        135
Met Ile Asn Pro Leu Leu Tyr Ser Leu Arg Asn Lys Asp Ile Lys Val
                   150
                                       155
Ala Leu Arg Arg Thr Leu Arg Lys Arg Asn Phe Xaa Leu Ser Ser Val
                165
                                    170
Val Cys Val
<210> 2359
<211> 324
<212> PRT
<213> Mus musculus (M100 8570471-17-6599-8104 424-1396)
<220>
<221> VARIANT
<222> (1)...(324)
<223> Xaa = Any Amino Acid
<400> 2359
Ile Phe Cys Val Tyr Arg Phe Ser Gln Arg Arg Met Asp Ser Val Asn
                                    10
Ile Ser Leu Val Thr Glu Phe Ile Leu Val Gly Leu Thr Asp Lys Pro
                                25
Tyr Leu Gln Ile Pro Leu Phe Phe Ile Phe Leu Ala Met Tyr Leu Val
                            40
Thr Ala Leu Gly Asn Leu Ser Leu Ile Ile Leu Thr Val Leu Asn Ser
                        55
His Leu His Thr Pro Met Tyr Phe Phe Leu Phe Asn Leu Ser Phe Val
                    70
                                        75
Asp Phe Cys Tyr Ser Ser Val Phe Thr Pro Gln Met Leu Met Asn Phe
                85
                                    90
Ile Thr Arg Lys Asn Thr Ile Ser Tyr Met Glu Cys Met Ser Gln Leu
```

```
105
           100
Tyr Phe Phe Cys Phe Phe Val Ile Ser Glu Cys Tyr Val Leu Thr Ser
                           120
                                               125
Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu Leu Tyr Asn
                                           140
                       135
Leu Val Met Ser Ser Lys Leu Cys Leu Asn Leu Met Leu Val Ser Tyr
                   150
                                       155
Phe Ile Ala Phe Ser Glu Ser Val Ala His Thr Val Cys Ile Met Arg
                                   170
Leu Asn Phe Cys Asp Ala Ser Lys Ile Asn His Tyr Phe Cys Asp Ile
                              185
           180
Pro Pro Leu Gln Leu Ser Cys Thr Thr Thr Tyr Ile Asn Lys Leu
                           200
Val Val Phe Val Ala Ser Ser Ile Asn Ile Ile Val Pro Ile Ser Thr
                       215
                                           220
Ile Phe Ile Ser Tyr Gly Phe Ile Leu Ser Ser Ile Phe His Ile His
                                      235
                   230
Ser Ser Glu Gly Arg Ser Lys Ala Phe Ser Thr Cys Ser Ser His Ile
                                   250
Ile Ala Ala Phe Leu Phe Phe Gly Ser Gly Ala Phe Met Tyr Phe Gln
                                                  270
                               265
                                       .
Pro Ser Ser Ala Glu Ser Met Asp Glu Gly Lys Ile Ser Ser Val Phe
                           280
                                               285
Tyr Thr Asn Val Ile Pro Met Met Asn Pro Leu Leu Tyr Ser Leu Arg
                       295
                                           300
Asn Lys Asp Ile Lys Val Ala Leu Arg Lys Thr Leu Ser Lys Arg Asn
                                      315
Ile Xaa Leu Tyr
<210> 2360
<211> 327
<213> Mus musculus (M101 8570471-19-17517-20152 1114-134)
<220>
<221> VARIANT
<222> (1)...(327)
<223> Xaa = Any Amino Acid
<400> 2360
Leu Phe Ile Phe His Lys Ile Ser Tyr Arg Ser Met Ala Leu Ile Asn
                                   10
1
Gly Ser Val Val Thr Glu Phe Ile Leu Leu Gly Leu Thr Asp Gln Pro
                               25
Asp Leu Gln Val Pro Leu Phe Leu Val Phe Leu Leu Met Tyr Met Ile
                           40
Thr Ala Leu Gly Asn Leu Thr Leu Ile Ile Leu Ile Val Leu Asn Ser
                       55
                                           60
His Leu His Thr Pro Met Tyr Phe Phe Leu Phe Asn Leu Ser Phe Val
                   70
                                       75
Asp Phe Cys Tyr Ser Ser Val Ile Ile Pro Lys Met Leu Met Asn Phe
               85
                                   90
Ile Leu Lys Lys Asn Phe Ile Ser Tyr Val Gly Cys Met Thr Gln Phe
                               105
                                                   110
           100
Tyr Leu Phe Gly Phe Cys Val Ile Leu Glu Cys Tyr Ile Leu Thr Ser
                           120
Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu Leu Tyr Asn
                       135
                                           140
Ile Val Met Ser Pro Lys Met Cys Ser Tyr Leu Met Leu Gly Ser Tyr
                                      155
                   150
```

```
Leu Met Gly Phe Ser Gly Ala Met Ile His Thr Gly Cys Val Leu Arg
            165
                               170
Leu Ser Phe Cys Asp Gly Asn Ile Ile Asn His Tyr Phe Cys Asp Leu
                               185
Leu Pro Leu Leu Gln Leu Ser Cys Thr Ser Thr Tyr Val Asn Glu Ile
                          200
Glu Val Leu Ile Val Ala Gly Lys Asp Ile Ile Val Pro Thr Val Ile
                      215
                                          220
Ile Phe Ile Ser Tyr Gly Phe Ile Leu Ser Ser Ile Phe Gln Met Lys
                  230
                                      235
Ser Thr Lys Gly Met Ser Lys Ala Phe Ser Thr Cys Ser Ser His Ile
                           250
Ile Ala Val Ser Leu Phe Phe Gly Ser Gly Ala Phe Met Tyr Leu Lys
                              265
                                                  270
Pro Asn Ser Thr Gly Thr Met Asn Asn Gly Lys Ile Pro Ser Ile Ile
                                               285
                    280
Tyr Thr Ile Leu Ile Pro Met Met Asn Pro Leu Ile Tyr Ser Leu Arg
               295
Asn Lys Asp Val Lys Val Ala Leu Arg Lys Thr Leu Arg Lys Lys Ile
                  310
Leu Xaa Ser Glu Thr Val Ile
               325
<210> 2361
<211> 341
<212> PRT
<213> Mus musculus (M104 8570471-3-1-2271 2172-1151)
<221> VARIANT
<222> (1)...(341)
<223> Xaa = Any Amino Acid
<400> 2361
Asn Phe Ala Ile Phe Phe Ser Val His Arg Phe Ser Xaa Arg Arg Met
                                   10
Ala Leu Val Asn Gly Ser Thr Val Thr Glu Phe Ile Leu Leu Gly Leu
                               25
Thr Asp Gln Pro Gly Leu Gln Met Pro Leu Phe Leu Leu Phe Leu Leu
                           40
Met Tyr Met Ile Thr Val Phe Gly Asn Leu Thr Leu Ile Phe Leu Ile
                       55
Leu Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Leu Asn
                   70
                                       75
Leu Ser Phe Val Asp Leu Cys Tyr Ser Ser Val Ile Thr Pro Lys Met
                                   90
Leu Met Asn Phe Ile Leu Lys Lys Asn Leu Ile Ser Tyr Met Gly Cys
                               105
Met Ser Gln Leu Tyr Phe Phe Cys Phe Phe Ile Ile Ser Glu Cys Tyr
                                               125
                           120
Val Leu Val Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro
                                           140
                       135
Leu Leu Tyr Asn Thr Ala Met Ser Pro Arg Val Cys Ser Tyr Leu Met
                                       155
                   150
Leu Gly Thr Tyr Leu Met Gly Phe Phe Asp Ala Met Ile His Thr Gly
                                   170
               165
Cys Met Leu Arg Leu Ser Phe Cys Asp Gly Asn Ile Ile Asn His Tyr
           180
                              185
Phe Cys Asp Val Leu Pro Leu Leu Gln Leu Ser Cys Thr Ser Thr Tyr
                           200
                                              205
Val Asn Glu Thr Glu Ile Phe Ile Val Gly Gly Lys Asp Ile Ile Leu
```

```
215
                                            220
Pro Ser Ala Ile Ile Phe Phe Ser Tyr Gly Phe Ile Leu Ser Asn Ile
                   230
                                       235
Phe Gln Ile Arg Ser Thr Leu Gly Arg Ser Lys Ala Phe Ser Thr Cys
                                   250
                245
Ser Ser His Ile Ile Ala Val Ser Leu Phe Phe Gly Ser Cys Gly Phe
            260
                               265
                                                   270
Met Tyr Leu Lys Pro Ser Ser Ala Val Ser Ile Asp Gln Gly Lys Ile
                           280
                                               285
        275
Ser Ser Ile Phe Tyr Thr Ile Val Val Pro Met Met Asn Pro Leu Ile
                       295
                                           300
Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Ala Leu Arg Lys Thr Leu
                310
                                       315
Ser Arg Arg Lys Phe Leu Lys Val Xaa Leu Gln Ser Arg His Phe Leu
               325
                                330
Cys Xaa Cys Thr Tyr
            340
<210> 2362
<211> 337
<212> PRT
<213> Mus musculus (M106 8570471-9-3672-5945 1670-660)
<220>
<221> VARIANT
<222> (1)...(337)
<223> Xaa = Any Amino Acid
Ile Asn Ile Phe Phe Leu Leu Pro Thr Xaa Asn Met Gln Val Gln Met
1
                5
                                    10
Ala Asp Thr Asn His Ser Thr Val Thr Glu Phe Ile Leu Ala Gly Leu
           20
                               25
Thr Asp Lys Pro Glu Leu Gln Leu Pro Leu Phe Leu Phe Leu Gly
                           40
Ile Tyr Leu Leu Thr Val Leu Gly Asn Leu Gly Met Ile Ile Leu Ile
                       55
Leu Leu Ser Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ser Ser
                   70
                                       75
Leu Ser Phe Ile Asp Leu Cys Tyr Ser Thr Val Ile Thr Pro Lys Met
                                   90
               85
Leu Val Asn Phe Val Ala Lys Lys Asn Val Ile Ser Tyr Glu Glu Cys
                               105
Met Thr Gln Leu Tyr Phe Phe Leu Ala Phe Val Ile Ser Glu Cys His
       115
                           120
                                               125
Met Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro
                       135
                                           140
Leu Leu Tyr Asn Val Thr Met Ser Tyr Gln Ile Cys Ser Trp Met Val
                   150
                                       155
Gly Gly Val Tyr Gly Met Gly Leu Ile Gly Ala Ala Val His Thr Leu
               165
                                   170
Cys Met Leu Arg Val Val Phe Cys Lys Ala Asn Ile Ile Asn His Tyr
           180
                              185
Phe Cys Asp Leu Phe Pro Leu Met Glu Leu Ala Cys Ser Ser Thr Tyr
                          200
                                               205
Val Asn Glu Val Val Leu Leu Cys Leu Ser Ala Phe Asn Ile Phe Ile
                       215
                                           220
Pro Thr Leu Thr Ile Leu Gly Ser Tyr Ile Phe Ile Ile Ser Ile
                   230
                                       235
Leu Arg Ile Lys Ser Thr Glu Gly Arg Phe Lys Ala Phe Ser Thr Cys
                                   250
```

```
Ser Ser His Phe Ser Ala Val Ser Val Phe Phe Gly Ser Leu Ala Phe
            260
                               265
 Met Tyr Leu Gln Pro Phe Ser Val Ser Ser Lys Asp Lys Gly Lys Val
                            280
                                                285
 Ser Ser Val Phe Tyr Thr Thr Ile Val Pro Met Leu Asn Pro Met Ile
                        295
                                            300
 Tyr Ser Leu Arg Asn Arg Asp Val Lys Leu Ala Leu Asn Lys Leu Phe
              310
                                       315
 Gln Lys Lys Phe His Val Xaa Arg Ser Ile Tyr Leu Arg Lys Thr Ile
                325
                                   330
 Gln
<210> 2363
<211> 256
<212> PRT
<213> Mus musculus (M107 8571727-11-1262-2044 781-16)
<220>
<221> VARIANT
<222> (1)...(256)
<223> Xaa = Any Amino Acid
<400> 2363
Ile Leu Leu Gly Leu Thr Gln Gln Pro Glu Leu Gln Leu Pro Leu Phe
 1
                5
                                    10
Phe Gln Phe Leu Gly Ile Tyr Val Val Ser Ile Val Gly Asn Leu Gly
            20
                                25
Leu Ile Val Leu Ile Val Leu Asn Pro His Leu His Thr Pro Met Tyr
                            40
Tyr Phe Leu Phe Asn Leu Ser Phe Thr Asp Leu Cys Tyr Ser Ser Ala
                       55
                                          60
Ile Thr Pro Lys Met Leu Val Gly Phe Val Asn Gln Asn Ile Ile Ala
                                       75
His Ala Glu Cys Leu Thr Gln Leu Phe Phe Phe Cys Phe Phe Val Leu
               85
                                   90
Asp Glu Cys Tyr Ile Cys Thr Glu Met Ala Tyr Asp Arg Tyr Ala Ala
           100
                               105
                                                   110
Ile Cys Lys Thr Leu Leu Asn Gln Val Thr Met Ser His Gln Val Cys
                           120
Leu Gly Asn His Lys Arg Leu Asp Tyr Ile Ile Phe Arg Asn Gly Lys
                       135
                                           140
Ile Lys Lys Ile Phe Leu Asn Val His Ile Tyr Phe Ile Ile Phe Xaa
                   150
                                      155
Phe Val Cys Gly Thr Ser Tyr Pro Xaa Ser Leu Ser Cys Xaa Ala Ser
               165
                                   170
Val Xaa Pro Leu Thr Tyr Ile Leu Arg Val Gly Thr Phe Val Ser Phe
           180
                               185
                                                   190
Val Trp Leu Ser Gln Thr Met Ser Tyr Tyr Phe Ile Ile Ala Asn Leu
       195
                           200
                                               205
Trp Asp Asn Leu Xaa Glu Ser Ser Phe Xaa Arg Leu Ile Cys Cys Ser
                       215
                                           220
Lys Gly Xaa Ser Lys Glu Gly Lys Xaa Lys Leu Leu Ser Phe Trp Ser
                  230
                                      235
Phe Phe Ile Val Leu Lys Gln Phe Arg Lys Glu Gly Leu Thr Ser Tyr
               245
                                  250
<210> 2364
<211> 333
<212> PRT
<213> Mus musculus (M111 8571727-21-4956-7261 1151-153)
```

<sup>1424</sup> 

```
<220>
<221> VARIANT
<222> (1)...(333)
<223> Xaa = Any Amino Acid
<400> 2364
Ile Leu Met Leu Xaa Leu Leu Leu Phe Leu Gln Glu Arg Met Val Leu
Glu Asn Ser Ser Ser Val Lys Glu Phe Ile Leu Leu Gly Leu Thr Gln
           20
                               25
Gln Pro Glu Leu Gln Met Pro Leu Phe Phe Leu Phe Leu Gly Ile Tyr
                           40
Ile Val Ser Met Val Gly Asn Leu Gly Leu Thr Val Leu Ile Val Leu
                       55
                                           60
Asn Pro His Leu His Asn Pro Met Tyr Tyr Phe Leu Phe Asn Leu Ser
                                       75
                   70
Phe Thr Asp Leu Cys Tyr Ser Thr Val Ile Thr Pro Arg Met Leu Val
               85
                                   90
Gly Phe Val Lys Gln Asn Thr Ile Ser His Ala Glu Cys Met Thr Gln
                               105
                                                  110
           100
His Phe Phe Cys Phe Phe Val Ile Asp Glu Cys Tyr Ile Leu Thr
                                                125
                          120
Ala Val Ala Tyr Asp Arg Tyr Ala Ala Ile Cys Lys Pro Leu Leu Tyr
                                           140
                       135
Gln Val Thr Met Ser His Gln Val Cys Leu Leu Met Thr Val Gly Val
                  150
                                       155
Tyr Val Met Gly Phe Leu Glu Ala Ile Ala His Thr Gly Ser Met Val
                                   170
               165
Ser Leu Thr Phe Cys Asp Gly Asn Ile Ile Asn His Tyr Ala Cys Asp
                               185
Ile Leu Pro Leu Leu Lys Leu Ser Cys Thr Ser Thr Thr Ile Asn Glu
                           200
Leu Val Val Phe Ile Val Val Gly Val Asn Val Ile Val Pro Thr Leu
                                           220
                       215
Thr Ile Phe Ile Ser Tyr Thr Leu Ile Leu Ser Asn Ile Leu Ser Ile
                   230
                                       235
His Ser Ala Glu Gly Arg Ser Lys Ala Phe Ser Thr Cys Gly Ser His
                                   250
                245
Val Ile Ala Val Ser Leu Phe Phe Gly Ala Ala Ala Phe Met Tyr Leu
                                                    270
                               265
           260
Lys Pro Ser Ser Ala Ser Glu Asp Asp Asp Lys Val Ser Thr Ile Phe
                           280
                                                285
       275
Tyr Thr Ile Val Gly Pro Met Leu Asn Pro Phe Ile Tyr Ser Leu Arg
                                           300
                       295
Asn Lys Asp Val Tyr Leu Ala Leu Arg Lys Thr Leu Met Lys Arg Ser
                                       315
                   310
Phe Thr Xaa Val Glu Ser Ile Phe Val Met Glu Leu Lys
               325
<210> 2365
<211> 344
<212> PRT
<213> Mus musculus (M112 8571727-22-3043-8090 3092-2061)
<220>
<221> VARIANT
<222> (1)...(344)
<223> Xaa = Any Amino Acid
```

<400> 2365

```
Ile Val Cys Phe Ile Ser Leu Phe Xaa Val Met Ser Gln Lys Arg Met
                 5
                                     10
 Ala Pro Arg Asn Ser Ser Ser Val Thr Glu Phe Ile Leu Val Gly Phe
             20
                                 25
 Ser Asn Gln Pro Ala Leu Gln Leu Pro Leu Phe Phe Val Phe Leu Gly
                             40
 Ile Tyr Val Leu Thr Val Ile Gly Asn Leu Gly Leu Ile Thr Leu Ile
                         55
                                              60
 Gly Leu Asn Ser Ser Leu His Thr Pro Met Tyr Phe Phe Leu Phe Asn
                                         75
 Leu Ser Phe Ile Asp Phe Cys Tyr Ser Cys Val Phe Thr Pro Lys Met
                                     90
 Leu Ser Asp Phe Val Ser Glu Asn Ile Ile Ser Tyr Met Gly Cys Met
             100
                                 105
 Thr Gln Leu Phe Phe Phe Cys Phe Phe Val Asn Ser Glu Cys Tyr Val
         115
                             120
                                                 125
 Leu Val Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu
                         135
 Leu Tyr Thr Val Thr Met Ser Pro Gln Val Cys Thr Leu Leu Met Phe
                    150
                                         155
 Cys Ser Tyr Val Ile Gly Phe Ala Gly Ala Met Ala His Thr Gly Ser
                                    170
                                                         175
 Met Leu Thr Leu Thr Phe Cys Asp Ser Asn Met Ile His His Tyr Leu
             180
                                185
                                                     190
 Cys Glu Val Leu Pro Leu Leu Gln Leu Ser Cys Thr Ser Thr Tyr Ala
         195
                             200
Asn Glu Leu Val Phe Phe Ile Val Val Gly Val Val Ile Thr Ala Ser
                        215
                                             220
Ser Ile Ser Ile Phe Ile Ser Tyr Ala Leu Ile Leu Ser Asn Ile Leu
                    230
                                        235
Lys Ile Pro Ser Ala Glu Gly Arg Ser Lys Ala Phe Gly Thr Trp Gly
                                     250
                                                         255
Ser His Val Val Ala Val Ala Leu Phe Phe Gly Ser Gly Ala Phe Thr
                                 265
Tyr Leu Thr Thr Ser Phe Pro Gly Ser Met Glu Glu Gly Arg Phe Ala
                            280
                                                 285
Ser Val Phe Tyr Thr Asn Val Val Pro Met Leu Asn Pro Leu Ile Tyr
                        295
Ser Leu Arg Asn Lys Asp Val Lys Leu Ala Leu Asn Lys Thr Leu Lys
                    310
                                        315
Arg Val Leu Phe Xaa Xaa Val Trp Cys Tyr His Trp Asn Xaa Ile Leu
                325
                                    330
Gly Lys His Thr Gln Ile His Phe
            340
<210> 2366
<211> 157
<213> Mus musculus (M113 8571727-23-1650-2708 1059-589)
<220>
<221> VARIANT
<222> (1)...(157)
<223> Xaa = Any Amino Acid
<400>2366
Ile Arg Phe Ala Gly Ser Ser Val His Thr Gly Cys Val Phe Leu Xaa
                                    10
Gly His Ala Ile Asn His Kaa Leu Phe Asn Ile Leu Thr Leu Leu Gln
                                25
Leu Ser Xaa Ala Thr Thr Tyr Val Asn Val Val Ile Leu Ile Gly Val
```

```
40
Tyr Ile Thr Val Pro Ser Phe Thr Ile Leu Ile Ser Tyr Val Phe Ile
                       55
                                           60
Phe Ile Asn Ile Leu Asn Ile Lys Ser Met Gln Arg Ile Ser Lys Asp
                                       75
                   70
Phe Ser Ile Cys Arg Phe His Ile Ala Ser Ile Tyr Val Phe Ile Glu
                                   90
               85
Phe Thr Ala Phe Lys Cys Phe Lys Tyr Ser Tyr Gly Ser Ile Asp Gln
                              105
                                                   110
           100
Gly Phe Tyr Ser Ser Val Phe Tyr Thr Asp Val Ile Leu Ile Leu Asn
                        120
                                               125
       115
Ile Ile Ile Tyr Ser Met Cys Ile Met Asp Val Glu Met Ala Leu Met
                      135
Asp Ala Leu Met Lys Phe Gln Arg Asn Val Phe His Leu
                   150
<210> 2367
<211> 127
<212> PRT
<213> Mus musculus (M114 8571727-23-3031-3453 387-9)
<220>
<221> VARIANT
<222> (1)...(127)
<223> Xaa = Any Amino Acid
<400>2367
His Ser Ile Gln Tyr Leu Asn Leu Ile Asn Leu Ser Tyr Ile Asp Leu
                                   10
Cys Tyr Ser Ser Val Pro Arg Ser Lys Met Leu Met Asn Phe Val Phe
                               25
Glu Lys Asn Ala Ile Ser Phe Val Gly Cys Asp Ser Ile Gln Phe Ser
                           40
Leu Val Pro Phe Leu Ser Phe Phe Leu Ser Phe Phe Leu Ser Phe Phe
                       55
Leu Ser Phe Phe Leu Ser Phe Phe Leu Ser Phe Phe Leu Val Ile Phe
                   70
                                       75
Xaa Tyr Tyr Thr Leu Thr Ser Met Ala Tyr Asp Phe Tyr Val Ala Ile
                                   90
Cys Ser Ser Leu Val His Xaa Val Thr Pro Leu Leu Gln Val Cys Phe
                              105
Phe Ser Phe Leu Leu Phe Phe Phe Cys Pro Leu Phe Pro Met
                           120
<210> 2368
<211> 133
<212> PRT
<213> Mus musculus (M115 8571727-24-1-1404 400-2)
<400>2368
Cys Asn Val Ile Thr Phe Thr Val Leu Thr Asp Met Asn Trp Gly Arg
                                   10
Met Ala Leu Gly Asn Asp Ser Ser Val Lys Glu Phe Ile Leu Leu Gly
                               25
           20
Leu Thr Gln Gln Pro Glu Leu Gln Leu Pro Leu Phe Phe Phe Leu
                           40
                                              45
Gly Val Tyr Ile Phe Ser Val Val Gly Asn Leu Gly Leu Ile Val Leu
                                           60
                       55
Ile Val Leu Asn Pro His Leu Gln Thr Pro Met Tyr Tyr Phe Leu Phe
                   70
                                       75
Asn Leu Ser Phe Thr Asp Leu Cys Tyr Ser Ser Val Ile Thr Pro Lys
```

```
85
                                    90
Met Leu Val Ser Phe Val Lys Gln Asn Ile Ile Ser His Ala Glu Cys
                            105
Met Thr Gln Leu Phe Phe Cys Phe Phe Val Ile Asp Glu Cys Tyr
                           120
        115
Ile Leu Thr Ala Met
    130
<210> 2369
<211> 262
<212> PRT
<213> Mus musculus (M117 8571727-26-4808-6724 1497-715)
<221> VARIANT
<222> (1)...(262)
<223> Xaa = Any Amino Acid
<400>2369
Ser Ser Leu His Ala Ser His Ser His Glu Leu Xaa Lys Gly Ile Val
                                    10
Gly Leu Phe Xaa Ala Ala Ser Tyr Ser Thr Val Lys Leu Pro Lys Met
            20
                                25
Leu Val Ser Phe Val Lys Gln Asn Thr Ile Ser Tyr Ala Glu Cys Met
        35
                            40
Thr Gln Leu Phe Phe Phe Cys Phe Phe Val Ile Asp Glu Cys Tyr Ile
                       55
Leu Thr Ala Met Ala Tyr Asp Met Phe Ala Ala Ile Ser Lys Pro Leu
                   70
Leu Tyr Gln Val Thr Met Ser His Trp Val Cys Leu Leu Met Ile Val
                85
                                   90
Gly Val Tyr Val Ile Gly Phe Ser Gly Ser His Tyr Thr Ser Met Pro
                               105
                                                   110
Asp Leu Xaa Trp Gln Arg His Tyr Met Cys Asp Ile Leu Leu Leu Leu
                           120
                                               125
Gln Leu Ser Cys Glu Ser Thr Ser Ile Asn Glu Leu Val Ile Tyr Arg
                       135
                                           140
Val Gly Phe Asn Val Thr Val Pro Ser Leu Thr Ile Phe Ile Ser Tyr
                    150
                                       155
Thr Leu Ile Leu Ser Asn Ile Pro Ser Ile His Ser Thr Glu Gly Arg
                                   170
Asn Cys Gly Ser His Val Ile Ala Leu Ser Leu Leu Tyr Gly Ile Val
           180
                               185
                                                   190
Ala Phe Thr Tyr Leu Lys Pro Ser Ser Val Ser Val Asp Asp Ala Asn
       195
                           200
                                               205
Val Ser Thr Ile Phe Phe Tyr Thr Val Val Gly Pro Met Leu Asn Pro
                       215
                                           220
Phe Leu His Ser Ile Arg Asn Lys Asp Val His Thr Ala Leu Arg Lys
                   230
                                       235
Thr Leu Asn Lys Ser Ser Phe Thr Xaa Val Xaa Val Cys Ile Cys Tyr
              245
                                250
Glu Ser Lys Ile Leu Gly
           260
<210> 2370
<211> 329
<212> PRT
<213> Mus musculus (M119 8573058-17-2172-5249 1514-528)
<220>
<221> VARIANT
```

<222> (1)...(329) <223> Xaa = Any Amino Acid <400>2370 Val Met Leu Leu Ala Phe Leu Leu Pro Thr Asp Asp Thr Ile Met His 10 1 Met Ala Met Glu Asn Asp Ser Ser Val Thr Glu Phe Val Phe Met Gly 25 Leu Thr Glu Gln Pro Glu Leu Arg Leu Pro Leu Phe Phe Val Phe Leu 45 40 Leu Asn Tyr Thr Ala Thr Val Met Gly Asn Leu Ser Leu Met Val Leu 55 Ile Cys Leu Asn Ser His Leu His Asn Pro Met Tyr Phe Phe Leu Phe 70 Asn Leu Ser Leu Val Asp Phe Cys Tyr Ser Phe Val Cys Thr Pro Lys 90 85 Met Leu Met Gly Phe Val Ser Glu Lys Ser Ile Ile Ser Tyr Thr Gly 110 105 100 Cys Met Thr Gln Leu Phe Phe Phe Cys Phe Phe Val Asn Ser Glu Cys 120 125 Tyr Val Leu Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys 140 135 Pro Leu Val Tyr Ala Ile Leu Met Ser Pro Arg Met Cys Ser Leu Leu 150 155 Met Ile Gly Ser Tyr Leu Met Gly Phe Ala Ser Ala Met Ala His Thr 170 165 Gly Cys Met Ile Arg Leu Lys Phe Cys Asp Ser Asn Ile Ile Asn His 190 185 Tyr Met Cys Glu Ile Phe Pro Leu Leu Gln Leu Ser Cys Ser Ser Thr 200 205 195 Tyr Ala Asn Glu Leu Val Ser Ser Leu Ile Ala Cys Ile Val Val Ile 220 215 Val Ser Gly Leu Val Ile Leu Met Ser Tyr Ala Ser Ile Leu Leu Asn 230 235 225 Val Val Gln Met Ser Ser Ala Thr Gly Trp Ser Lys Ala Met Gly Thr 250 245 Cys Gly Ser His Ile Ile Thr Val Ser Leu Phe Tyr Gly Ser Gly Leu 265 260 Leu Thr Tyr Val Lys Pro Ala Ser Ala Glu Ser Val Asp Gln Gly Lys 280 285 Phe Phe Ser Val Phe Tyr Thr Leu Met Val Pro Met Leu Asn Pro Leu 300 295 Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Leu Ala Ala Lys Arg Thr 315 310 Met Asn Arg Ile Thr Ile Xaa Gly Lys 325 <210> 2371 <211> 335 <213> Mus musculus (M122 8573058-3-1-3007 1710-2714) <220> <221> VARIANT <222> (1)...(335) <223> Xaa = Any Amino Acid <400>2371 Val Leu Ile Leu Pro Leu His Leu Phe Leu Gln Met Ser Leu Asn Ala 10 Gln Lys Thr Met Glu Asn Asp Ser Ser Val Ser Glu Phe Ile Leu Met

```
Gly Leu Thr Asp Gln Pro Glu Leu Gln Leu Pro Leu Phe Val Leu Phe
                             40
 Leu Val Asn Tyr Thr Val Thr Val Met Gly Asn Leu Ser Leu Met Asn
                         55
 Leu Ile Cys Leu Asn Ser Asn Leu His Thr Pro Met Tyr Phe Phe Ile
                     70
 Phe Asn Leu Ser Phe Ile Asp Phe Cys Tyr Ser Met Val Phe Thr Pro
                                    90
 Lys Met Leu Met Gly Phe Val Val Glu Lys Asn Ile Ile Ser Phe Arg
                                105
 Gly Cys Met Thr Gln Leu Phe Phe Phe Leu Phe Phe Val Asn Ser Glu
                            120
                                                125
 Ser Tyr Val Leu Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys
                        135
                                            140
 Gln Pro Leu Leu Tyr Lys Ala Val Met Ser Pro Gly Ile Cys Phe Leu
                    150
                                        155
 Leu Ile Phe Cys Thr Tyr Leu Met Gly Leu Val Ser Ala Leu Phe His
                165
                                    170
 Thr Gly Phe Met Ile Arg Leu Asn Phe Cys Asp Ser Asn Val Ile Asn
            180
                                185
 His Tyr Met Cys Asp Ile Phe Pro Leu Phe Arg Leu Ser Cys Ser Ser
                            200
                                                205
 Thr Tyr Leu Thr Glu Leu Val Ser Ser Ala Val Val Gly Thr Ala Ile
                        215
                                        . 220
 Ile Leu Cys Cys Leu Ile Ile Leu Ile Ser Tyr Gly Met Ile Leu Tyr
                    230
                                        235
Asn Ile Ile His Met Ser Ser Gly Lys Gly Trp Ser Lys Ala Leu Gly
                245
                                    250
Thr Cys Gly Ser His Ile Ile Thr Val Ser Leu Phe Tyr Val Thr Gly
            260
                                265
Met Leu Ala Tyr Val Lys Pro Ser Ser Ala Glu Thr Val Gly Gln Gly
                            280 . 285
Lys Ile Phe Ser Val Phe Tyr Thr Phe Leu Val Pro Met Leu Asn Pro
                        295
                                            300
Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Leu Ala Val Lys Lys
                   310
                                       315
Thr Trp Lys Arg Leu Thr Cys Xaa Ile Thr His Ser Asn Val Pro
                325
<210> 2372
<211> 131
<212> PRT
<213> Mus musculus (M123 8573058-5-4486-4920 411-18)
<220>
<221> VARIANT
<222> (1)...(131)
<223> Xaa = Any Amino Acid
<400>2372
Leu Gly Gly Glu Asp Arg Phe Ser Leu Asn Asn Glu Ser Leu Ile Asn
                                   10
Asn Ser Gly Leu Val Pro Cys Thr Phe His Ile Leu Thr Ser Phe Cys
                                25
Lys Ser Arg Ser Xaa Thr Phe Arg Thr Cys Gly Ser His Phe Ile Ala
                            40
Val Ser Leu Phe Tyr Gly Ala Ser Ala Phe Met Tyr Leu Lys Pro Ser
                       55
                                           60
Ser Ala Ser Val Asp Asp Asp Lys Ile Ser Thr Ile Phe Tyr Thr Ile
                                       75
```

Val Gly Pro Met Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn Lys Asp 85 90 Val His Ile Ala Leu Arg Lys Tyr Phe Glu Glu Lys Ser Phe Ile Xaa 105 100 Glu Glu Leu Xaa Leu Ile Xaa Met Glu Asn Leu Met Val Cys Gln Ile 115 120 Tyr Asn Phe 130 <210> 2373 <211> 167 <212> PRT <213> Mus musculus (M124 8573058-8-1-894 16-516) Leu Thr His Gly Ser Thr Pro Thr Gly Pro Ile Thr Ala Pro Ala Leu 10 Thr Val Cys Met Val Trp Leu Gln Phe Leu Asp Ser Pro Leu Thr Thr 25 Pro Tyr Met Cys His Ile Phe Pro Leu Leu Gln Val Ser Cys Ser Ser 45 40 Pro Tyr Val Asn Gln Leu Met Ser Tyr Ile Ala Val Gly Thr Ala Ile 60 55 Ile Leu Cys Ser Leu Ile Ile Leu Val Ser Tyr Ala Met Ile Leu Phe 70 75 Asn Ile Ile His Ile Ser Ser Gly Lys Gly Trp Ser Lys Ala Leu Gly 90 85 Thr Cys Gly Ser His Ile Ile Thr Val Ser Leu Phe Tyr Gly Ser Gly 100 105 110 Leu Leu Ala Tyr Val Asn Pro Ser Ser Ala Glu Thr Val Gly Gln Ala 125 120 115 Lys Phe Phe Ser Val Phe Tyr Thr Leu Leu Val Pro Met Leu Asn Pro 135 140 Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Leu Ala Met Lys Lys 150 155 Ser Trp Lys Arg Ile Thr Ser 165 <210> 2374 <211> 337 <212> PRT <213> Mus musculus (M126 8574266-10-448-5833 4192-5202) <220> <221> VARIANT <222> (1)...(337) <223> Xaa = Any Amino Acid <400>2374 Leu Phe Ser Ser Cys Tyr His Lys Phe Ile Cys Lys Met Thr Ala Arg 10 Asn Met Thr Thr Met Ser Gly Phe Leu Leu Met Gly Phe Ser Asp Asn 25 His Glu Leu Gln Ile Leu Gln Ala Leu Leu Phe Leu Leu Thr Tyr Leu 40 Leu Gly Ser Ala Gly Asn Phe Ile Ile Ile Thr Ile Thr Thr Leu Asp 55 Pro Gln Leu Gln Ser Pro Met Tyr Tyr Phe Leu Lys Gln Leu Ser Thr 75 Leu Asp Leu Ser Ser Leu Ser Val Thr Val Pro Gln Tyr Val Ala Ser 90

```
Ser Leu Ala Arg Ser Gly Tyr Ile Ser Tyr Gly Gln Cys Met Leu Gln
                                105
Ile Phe Phe Phe Thr Gly Leu Ala Trp Ser Glu Met Ala Thr Leu Thr
                            120
                                                125
Val Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Leu Pro Leu His Tyr
                        135
                                            140
Glu Val Ile Met Ser Pro Arg Lys Cys Thr Trp Ala Val Ala Ala Val
                    150
                                        155
Trp Leu Ser Gly Gly Ile Ser Gly Thr Leu Phe Thr Ala Ser Thr Leu
                165
                                    170
Ser Ile Arg Phe Cys Gly Asp Lys Ile Ile His Gln Phe Phe Cys Asp
            180
                               185
Ile Pro Gln Leu Leu Lys Leu Ser Cys Ser Asn Asp Tyr Phe Gly Val
        195
                            200
                                                205
Leu Glu Val Ser Thr Phe Met Ser Val Met Ala Phe Ala Cys Phe Val
                        215
                                            220
Gly Ile Ala Phe Ser Tyr Gly Gln Ile Phe Ser Thr Val Leu Arg Met
                    230
                                        235
Pro Ser Ala Glu Gly Arg Ser Lys Val Phe Ser Thr Cys Leu Pro His
               245
                                    250
Leu Phe Val Val Ser Phe Phe Leu Ser Thr Gly Ile Cys Ala Tyr Leu
                               265
Lys Pro Thr Ser Asp Ser Pro Thr Ala Leu Asp Leu Met Leu Ser Ile
                            280
                                                285
Phe Tyr Thr Leu Leu Pro Pro Thr Leu Asn Pro Val Ile Tyr Ser Leu
                       295
                                           300
Arg Asn Glu Ser Leu Lys Arg Ala Leu Lys Lys Leu Leu Leu Ser Glu
               310
                                       315
Glu Phe Ile Arg Lys Lys Cys Leu Phe Tyr Phe Xaa Cys Leu Leu Thr
                                   330
```

<210> 2375

<211> 333

<212> PRT

<213> Mus musculus (M127 8574266-13-1078-2817 1563-564)

<220>

<221> VARIANT

<222> (1)...(333)

<223> Xaa = Any Amino Acid

## <400>2375

Leu Ser Phe Leu Ser Gly Asp Glu Tyr Gln Leu Leu Ser Val Gln Glu 10 Asn Ser Leu Ser Val Lys Arg Phe Ala Phe Ser Lys Phe Ser Glu Val 25 Pro Gly Glu Cys Phe Leu Leu Phe Thr Leu Ile Leu Leu Met Phe Leu 40 Val Ser Leu Thr Gly Asn Glu Leu Ile Val Ile Ala Ile Cys Thr Ser 55 Pro Ala Leu His Thr Pro Met Tyr Phe Phe Leu Ala Asn Leu Ser Leu 70 75 Leu Glu Ile Gly Tyr Thr Cys Ser Val Ile Pro Lys Met Leu Gln Ser 90 Leu Val Ser Glu Ala Arg Glu Ile Ser Arg Glu Gly Cys Ala Thr Gln 105 Met Phe Phe Phe Thr Phe Phe Gly Ile Thr Glu Cys Cys Leu Leu Ala 120 125 Ala Met Ala Tyr Asp Arg Cys Met Ala Ile Cys Ser Pro Leu His Tyr

PCT/US00/27582 WO 01/27158

```
135
                                            140
Ala Thr Arg Met Ser His Gly Val Cys Ala His Leu Ala Ile Val Ser
                150
                                      155
Trp Gly Met Gly Cys Ile Val Gly Leu Gly Gln Thr Asn Phe Ile Phe
                                   170
                165
Ser Leu Asn Phe Cys Gly Pro Cys Glu Ile Asp His Phe Phe Cys Asp
                               185
           180
Leu Pro Pro Val Leu Ala Leu Ala Cys Gly Asp Thr Ser Gln Asn Glu
                            200
                                                205
Ala Ala Ile Phe Val Ala Ala Ile Leu Cys Ile Ser Ser Pro Phe Leu
                       215
                                           220
Leu Ile Ile Tyr Ser Tyr Val Arg Ile Leu Val Ala Val Leu Val Met
                    230
                                       235
Pro Ser Pro Glu Gly Arg His Lys Ala Leu Ser Thr Cys Ser Ser His
                                   250
                245
Leu Leu Val Val Thr Leu Phe Phe Gly Ser Gly Ser Ile Thr Tyr Leu
           260
                               265
Arg Pro Lys Ser Ser His Leu Pro Gly Met Asp Lys Leu Leu Ala Leu
       275
                           280
Phe Tyr Thr Ala Val Thr Ser Met Leu Asn Pro Ile Ile Tyr Ser Leu
                       295
                                          300
Arg Asn Lys Glu Val Lys Thr Ala Leu Arg Lys Thr Leu Ser Leu Lys
                                      315
                  310
Thr Ser Arg Ala Ile Asn Arg Xaa Gln Asn Leu Ala Glu
               325
<210> 2376
<211> 356
<212> PRT
<213> Mus musculus (M129 8574266-7-9797-11994 2006-942)
<220>
<221> VARIANT
<222> (1)...(356)
<223> Xaa = Any Amino Acid
<400>2376
Asn Phe Phe Leu Gln Ile Xaa Ser Gln Asn Tyr Gln Xaa Gly Xaa Leu
                                   10
                5
Lys Glu Ile Met Thr Lys Ser Asn Phe Ser Ser Pro Ile Cys Phe Arg
           20
                               25
Leu Pro Gly Phe Ser Asp His Leu Xaa Leu Asp Xaa Thr Leu Phe Leu
                           40
Ala Thr Ser Val Ile Asp Ile Val Met Leu Thr Gln Asn Thr Met Ile
                       55
Ile Leu Val Ser Phe Leu Asn Ser Arg Leu Gln Thr Pro Met Tyr Phe
                   70
                                       75
Phe Leu Ser Asn Phe Phe Phe Leu Asp Leu Cys Phe Met Thr Asn Val
                                  90
Leu Xaa Ile Val Xaa Thr Ser Lys Gly Pro Glu Lys Ile Ile Ser Cys
           100
                              105
```

Cys Ala Ile His Val Tyr Ile Val Leu Xaa Leu Asp Phe Thr Lys Cys 120

Val Leu Leu Thr Met Met Ala Tyr Asn Pro Val Thr Pro Ile Cys Trp

Pro Leu Xaa Tyr Pro Thr Thr His Pro Lys Phe Val Asp Ile His Pro

Lys Phe Pro Xaa Lys Pro Ala Ala Leu Ala Trp Ile Cys Ser Phe Met

Val Phe Thr Ile Gln Thr Thr Leu Val Phe Gln Leu Ser Leu Cys Ser

185

J

135

. 150

180

170

125

140

155

```
His His Arg Met Asn Asp Phe Leu Cys Val Arg Asn Pro Pro Leu Val
        195
                      200
 Lys Ile Thr Phe Met Asp Thr Thr Ser Leu Glu Lys His Ile Ser Val
                        215
                                             220
 Phe Thr Phe Leu Xaa Ala Val Ile Pro Cys Gly Glu Tyr Ser Ile Ile
                    230
                                        235
 Tyr Leu Leu Val Leu Leu Lys Val Trp Leu Lys Ile Lys Phe Thr Gly
                 245
                                    250
 Arg Met Lys Thr Phe Gly Ser Cys Gly Phe His Leu Met Ala Ile Val
                                265
 Leu Phe Phe Gly Asn Glu Ser Ser Val Tyr Met Val Tyr Met Tyr Pro
                            280
                                                285
Arg Ala Asn Ala Cys Gln Tyr Arg Lys Phe Ser Val Phe Tyr Met Ile
                        295
Val Thr Pro Ser Ile Asn Pro Leu Ile Tyr Leu Arg Asn Lys Glu Phe
                    310
                                        315
Arg Trp Ala Val Gln Arg Leu Val Thr Arg Asp Pro Ser Xaa Gly Lys
                325
                                    330
Ile Arg Gln Ser Leu Thr Ile Phe Gln Ala Phe Gly Ile Gly Arg His
            340
                                345
Tyr Ile Tyr Cys
        355
<210> 2377
<211> 323
<212> PRT
<213> Mus musculus (M130 8574266-9-11171-19240 5578-6546)
Val Arg Ile Leu Thr Val Asn Thr Asn Met Trp Ile Asn Asn Gln Ser
                                    10
Ser Val Asp Asp Phe Ile Leu Leu Gly Phe Ser Asp Arg Pro Trp Leu
                                25
                                                    30
Glu Thr Pro Leu Phe Val Ile Phe Leu Val Ala Tyr Ile Phe Ala Leu
                            40
Phe Gly Asn Ile Ser Ile Ile Leu Val Ser Arg Leu Asp Pro Gln Leu
                        55
Asp Ser Pro Met Tyr Phe Phe Val Ser Asn Leu Ser Leu Leu Asp Leu
                    70
                                        75
Cys Tyr Thr Thr Ser Thr Val Pro Gln Met Leu Val Asn Leu Arg Gly
                85
                                    90
Pro Glu Lys Thr Ile Ser Tyr Gly Gly Cys Val Ala Gln Leu Tyr Ile
            100
                                105
Phe Leu Ala Leu Gly Ser Thr Glu Cys Ile Leu Leu Ala Ile Met Ala
                            120
                                                125
Phe Asp Arg Phe Ala Ala Ile-Cys Arg Pro Leu His Tyr-Pro Ile Ile
                        135
                                            140
Met Asn Gln Lys Arg Cys Ile His Met Ala Thr Gly Thr Trp Ile Ser
                    150
                                        155
Gly Phe Ala Asn Ser Leu Val Gln Ser Thr Leu Thr Val Val Ala Pro
                165
                                    170
Arg Cys Gly Gln Arg Val Ile Asp His Phe Phe Cys Glu Val Pro Ala
           180
                                185
Leu Leu Lys Leu Ala Cys Thr Asp Thr Ser Val Asn Glu Ala Glu Leu
                           200
Asn Val Leu Gly Ala Leu Leu Leu Val Pro Leu Ser Leu Ile Leu
                       215
                                            220
Gly Thr Tyr Val Phe Ile Ala Gln Ala Val Leu Lys Leu Arg Ser Ala
                   230
                                       235
Glu Ser Arg Arg Lys Ala Phe Asn Thr Cys Ala Ser His Leu Leu Val
                                    250
```

```
Val Ser Leu Phe Tyr Phe Thr Ala Ile Ser Met Tyr Val Gln Pro Pro
                               265
Ser Ser Tyr Ser His Glu Arg Gly Lys Ile Met Ala Leu Phe Tyr Gly
                           280
        275
Ile Val Thr Pro Thr Leu Asn Pro Phe Ile Tyr Thr Leu Arg Asn Lys
                      295
Asp Val Lys Ala Ala Leu Arg Arg Ala Leu Thr Lys Glu Phe Trp Val
                  310
Lys Ala Arg
<210> 2378
<211> 329
<212> PRT
<213> Mus musculus (M131 8574266-9-30686-36974 2322-3308)
<220>
<221> VARIANT
<222> (1)...(329)
<223> Xaa = Any Amino Acid
<400>2378
Leu Leu Ser Val Val Phe Phe Xaa Leu Phe Leu Asn Arg Val Ser Arg
                            10
          5
Val Ile Ile Met Asn Val Ser Phe Lys Thr Gly Phe Leu Leu Met Gly
           20
                               25
Phe Ser Asp Glu Arg Asn Leu Gln Ile Leu His Ala Val Leu Phe Leu
        35
Ile Thr Tyr Leu Leu Ala Ile Met Gly Asn Leu Leu Ile Ile Thr Ile
Ile Thr Leu Asp Gln Arg Leu His Ser Pro Met Tyr Tyr Phe Leu Lys
                                       75
                   70
His Leu Ser Phe Leu Asp Leu Cys Phe Ile Ser Val Thr Val Pro Gln
                                   90
Ser Ile Ala Asn Ser Leu Met Asn Asn Gly Phe Ile Ser Leu Gly Gln
                               105
Cys Met Leu Gln Val Phe Phe Phe Ile Ala Leu Ala Ser Ser Glu Val
                           120
                                               125
Ala Ile Leu Thr Val Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Arg
                       135
                                            140
Pro Leu Gln Tyr Glu Thr Ile Met Asp Pro His Ala Cys Lys Cys Ala
                                        155
                   150
Val Ile Ala Val Trp Met Ala Gly Gly Leu Ser Gly Leu Leu His Thr
                165
                                    170
Gly Val Asn Phe Ser Ile Pro Leu Cys Gly Lys Arg Ile Ile His Gln
           180
                               185
Phe Phe Cys Asp Ile Pro Gln Met Leu Lys Leu Ala Cys Ser Tyr Glu
                                                205
                           200
       195
Phe Ile Asn Glu Ile Ala Val Ala Ala Phe Thr Thr Ser Thr Ala Phe
                                            220
                       215
Val Cys Leu Ile Ala Ile Val Phe Ser Tyr Thr Gln Ile Phe Ser Thr
                   230
                                        235
Val Met Arg Ile Pro Ser Ala Asp Ser Arg Thr Lys Val Phe Ser Thr
                                   250
               245
Cys Leu Pro His Leu Phe Val Val Met Phe Phe Leu Ser Ala Ala Gly
                               265
            260
Phe Glu Phe Leu Arg Pro Pro Ser Asp Ser Leu Ser Ala Met Asp Leu
                           280
Val Phe Ser Ile Phe Tyr Thr Val Ile Pro Pro Thr Leu Asn Pro Leu
                        295
Ile Tyr Ser Leu Arg Asn Glu Ala Met Lys Ala Ala Leu Arg Lys Val
```

```
310
                                         315
                                                             320
 Leu Ser Lys Glu Glu Phe Ser Arg Arg
                 325
 <210> 2379
 <211> 324
 <212> PRT
 <213> Mus musculus (M132 8574266-9-4118-8767 2921-3891)
 <220>
 <221> VARIANT
 <222> (1)...(324)
 <223> Xaa = Any Amino Acid
 Cys Asn Ile Phe Leu Leu Val Leu His Gln Val Thr Gly Met Ile Asn
                                     10
 Ser Ser Val Ser Ser Asp Phe Ile Leu Val Gly Phe Ser Asp Gln Pro
            20
 Gln Leu Glu Arg Arg Leu Phe Ile Val Val Leu Ile Ser Tyr Leu Leu
                             40
 Thr Leu Val Gly Asn Thr Ile Ile Ile Leu Ile Ser Ser Ile Asp Ser
                        55
                                            60
Lys Leu Lys Thr Pro Met Tyr Phe Phe Leu Thr His Leu Ser Phe Val
                    70
                                        75
Asp Ile Cys Phe Thr Thr Ser Ile Val Pro Gln Leu Leu Trp Asn Leu
                85
                                    90
Lys Gly Pro Ala Lys Thr Ile Thr Ala Val Gly Cys Ala Val Gln Leu
            100
                                105
Tyr Val Ser Leu Thr Leu Gly Ser Thr Glu Cys Ile Leu Leu Ala Val
                            120
                                                125
Met Ala Phe Asp Arg Tyr Ala Ala Val Cys Lys Pro Leu His Tyr Val
                        135
                                            140
Ala Val Met Asn Pro Gln Leu Cys Arg Ala Leu Ala Gly Ile Ser Trp
                    150
                                        155
Leu Ser Gly Ile Gly Asn Ala Leu Ile Gln Gly Thr Ile Thr Leu Trp
                165
                                    170
Leu Pro Arg Cys Gly His Leu Trp Leu His His Phe Phe Cys Glu Val
                                185
                                                    190
Pro Ser Met Ile Lys Leu Ala Cys Val Asp Ile His Ala Asn Glu Val
                            200
                                                205
Gln Leu Phe Val Ala Ser Leu Val Leu Leu Leu Pro Leu Ala Leu
                        215
                                            220
Ile Leu Thr Ser Tyr Gly His Ile Ala Lys Ala Val Ile Arg Ile Lys
                    230
                                        235
Ser Ser Gln Ala Trp Arg Arg Ala Leu Gly Thr Cys Gly Ser His Leu
                245
                                    250
Met Val Val Ser Leu Phe Tyr Gly Ser Ile Thr Ala Ile Tyr Ile Gln
            260
                                265
                                                    270
Pro Asn Ser Ser Tyr Ala His Thr His Gly Lys Phe Ile Ser Leu Phe
                            280
                                                285
Tyr Thr Val Met Thr Pro Thr Leu Asn Pro Leu Ile Tyr Thr Leu Arg
                        295
                                           300
Asn Lys Glu Val Lys Gly Ala Leu Gly Arg Leu Phe Asn Arg Ala Ser
                   310
                                        315
Gly Val Xaa Gln
<210> 2380
<211> 341
<212> PRT
```

1436

```
<213> Mus musculus (M133 8574277-10-1-1870 1597-577)
 <220>
 <221> VARIANT
 <222> (1)...(341)
 <223> Xaa = Any Amino Acid
 <400>2380
Val Leu Leu Asn His Thr Phe Ile Thr Glu Phe Leu Leu Gly Val
                                   10
Thr Asp Ile Gln Glu Leu Asn Pro Ile Leu Phe Val Met Val Leu Ala
Met Tyr Phe Ile Asn Val Phe Gly Asn Gly Ala Ile Met Met Ile Val
                            40
Ile Leu Asp Ser Arg Leu Tyr Ser Pro Met Tyr Phe Phe Leu Gly Asn
                    55
                                            60
Leu Ala Cys Leu Asp Ile Cys Phe Ser Thr Val Thr Val Pro Lys Met
                    70
                                        75
Leu Glu Asn Phe Phe Ser Thr Ser Lys Ala Ile Ser Phe Leu Gly Cys
                                    90
Ile Thr Gln Leu His Phe Phe His Phe Leu Gly Cys Thr Asp Ala Leu
                                105
Leu Leu Thr Val Met Ala Phe Asp Arg Phe Val Ala Ile Cys Arg Pro
                            120
Leu His Tyr Pro Ser Ile Met Asn Arg Gln Val Cys Ile Gln Val Ala
                        135
                                            140
Ala Thr Ile Trp Ala Ile Pro Phe Leu His Ala Leu Val His Ser Ile
                   150
                                        155
Leu Thr Ser Gln Leu Asn Phe Cys Gly Ser Asn Arg Ile His His Phe
                165
                                    170
Phe Cys Asp Val Lys Pro Leu Leu Glu Leu Ala Cys Gly Asn Thr Glu
           180
                               185
Leu Asn Arg Trp Leu Leu Asn Thr Leu Ala Gly Thr Ile Gly Ile Gly
                           200
        195
                                                205
Leu Phe Phe Leu Thr Phe Leu Ser Tyr Phe Tyr Ile Val Thr Tyr Leu
                        215
                                            220
Phe Leu Lys Thr His Ser Cys Ser Met Leu His Lys Ala Leu Ser Thr
                    230
                                        235
Cys Ala Ser His Phe Met Val Val Met Ile Phe Tyr Ala Pro Val Leu
               245
                                    250
Phe Ile Tyr Ile Asn Pro Asp Ser Gly Ser Ser Leu Glu Lys Asp Arg
            260
                                265
                                                    270
Ile Ile Ala Val Met Tyr Thr Val Val Thr Pro Ala Leu Asn Pro Leu
                           280
                                                285
Ile Tyr Ala Leu Arg Asn Lys Glu Val Arg Cys Ala Leu Asn Arg Lys
                       295
                                            300.
Leu Arg Ile Leu Ile Xaa Leu Gly Arg Asn Leu Val Ser Tyr Phe Val
                   310
                                       315
Ile Ser Gln His Lys Gln Leu Leu Xaa Lys Ser Met Cys Glu Ile Ser
                325
                                   330
Xaa Phe Xaa Ile Cys
            340
<210> 2381
<211> 284
<212> PRT
<213> Mus musculus (M136 8574277-13-1-992 974-124)
<220>
<221> VARIANT
<222> (1)...(284)
```

<223> Xaa = Any Amino Acid

```
Cys Ile Tyr Ile Cys Val Cys Val Cys Val Cys Val Cys Val Cys Val
                                    10
Cys Ile Ser Ile Cys Thr Tyr Leu His Ile Xaa Ile His Met Cys Val
            20
                                25
Gln Val Val Ile Lys Leu Lys Val Lys Xaa Val Thr Trp Lys Glu Val
                            40
Xaa Lys Met Ser Val Glu Lys Arg Thr Gln Ser Arg Gln Lys Ser Gly
Tyr Leu Ala Asn Cys Phe Leu Gln Ser Phe Ile Leu Gly Ser Val Asp
                   70
                                        75
Arg Asn Ile Cys Leu Leu Ile Val Met Val Tyr Asp His Tyr Leu Thr
                                    90
Ile Cys His His Leu Xaa Tyr Pro Phe Leu Met Gly Pro Leu Trp Gly
                               105
Leu Gly Phe Gly Leu Thr Thr Ser Phe Val Val Asp Glu Leu Ile Val
                           120
Ala Leu Met Ala Gln Leu Arg Phe Cys Val Pro Lys Gln Ile Asp His
                       135
                                           140
Phe Tyr Tyr Asp Phe Ser Pro Leu Val Val Leu Ala Tyr Thr Asp Thr
                   150
                                       155
Gly Leu Val Gln Val Thr Thr Phe Val Leu Phe Val Val Phe Leu Thr
                                    170
                165
Val Pro Phe Gly Leu Val Leu Ile Ser Cys Ala Gln Ile Ala Val Thr
           180
                               185
                                                    190
Val Leu Arg Val Pro Ser Arg Thr Arg Arg Asn Lys Ala Phe Ser Thr
        195
                            200
Cys Ser Ser His Leu Asp Glu Val Ser Thr Phe Tyr Gly Ser Leu Met
                        215
                                            220
Val Trp Tyr Thr Glu Pro Ser Ala Val His Ser Gln Ile Leu Ser Lys
                    230
                                        235
Val Ile Ala Leu Leu Tyr Thr Val Val Thr Thr Ile Phe Asp Pro Gly
                245
                                    250
Ile Tyr Thr Leu Arg Asn Gln Glu Val Gln Gln Ser Leu Arg Arg His
                                265
Leu Tyr Cys Lys Pro Thr Glu Met Xaa Pro Lys Arg
```

<210> 2382

<211> 314

<212> PRT

<213> Mus musculus (M143 8574277-22-875-4053 855-1796)

<400>2382

```
115
                             120
                                                 125
  Ile Cys His Pro Leu Arg Tyr Pro His Leu Met Gly Pro Gln Trp Cys
                         135
                                             140
 Leu Gly Leu Val Leu Thr Val Trp Leu Ser Gly Phe Met Val Asp Gly
                    150
                                         155
 Leu Val Val Ala Leu Met Ala Gln Leu Arg Phe Cys Gly Pro Asn Leu
                 165
                                    170
 Val Asp His Phe Tyr Cys Asp Phe Ser Pro Leu Met Val Leu Ala Cys
                                185
 Ser Asp Thr Gln Val Ala Gln Val Thr Thr Phe Val Leu Ser Val Val
                            200
                                                 205
 Phe Leu Thr Val Pro Phe Gly Leu Val Leu Ile Ser Tyr Ala Gln Ile
                        215
                                             220
 Val Val Thr Val Leu Arg Val Pro Ser Gly Thr Arg Arg Thr Lys Ala
                    230
                                         235
 Phe Ser Thr Cys Ser Ser His Leu Ala Val Val Ser Thr Phe Tyr Gly
                 245
                                    250
 Thr Leu Met Val Leu Tyr Ile Val Pro Ser Ala Val His Ser Gln Leu
             260
                                265
                                                    270
 Leu Ser Lys Val Ile Ala Leu Leu Tyr Thr Val Val Thr Pro Ile Phe
        275
                             280
                                                 285
 Asn Pro Val Ile Tyr Thr Leu Arg Asn Gln Glu Val Gln Gln Ala Leu
                         295
 Arg Arg Leu Leu Tyr Cys Lys Pro Thr Glu
                     310
 <210> 2383
 <211> 107
 <212> PRT
 <213> Mus musculus (M144 8574277-30-676-1123 424-104)
 <220>
 <221> VARIANT
 <222> (1)...(107)
<223> Xaa = Any Amino Acid
<400>2383
Ser Gly Val Leu Gly Asn Lys Leu Ser Leu Cys Leu Xaa Val Xaa Arg
                                    10
Val Phe Phe Ser Cys Gly Xaa Val Pro Ser Ala Gln Gly Lys Arg Lys
                                25
Ser Leu Ala Thr Cys Ser Ser His Leu Ser Val Val Leu Leu Phe Tyr
                           40
Ser Thr Val Phe Ala Thr Tyr Leu Lys Pro Pro Ser Thr Ser His Ser
                       55
                                           60
Ser Ala Glu Val Val Ala Ala Val Met Tyr Thr Leu Val Thr Pro Thr
                    70
                                       75
Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Ser Ser
                85
                                   90
Leu Arg Lys Ile Leu Asn Met Asp Lys Phe Gln
            100
<210> 2384
<211> 232
<212> PRT
<213> Mus musculus (M148 8574277-5-2944-4486 2-698)
<220>
<221> VARIANT
<222> (1)...(232)
<223> Xaa = Any Amino Acid
```

```
<400>2384
Lys Ser Leu Ala Thr Leu Ala Gly Cys Leu Leu Gln Phe Leu Thr Phe
Thr Ser Leu Asp Ala Asp Glu Tyr Phe Leu Leu Thr Leu Met Ala His
Asp His Cys Leu Ala Ile Phe Tyr Ser Leu Xaa Tyr Pro Arg Leu Met
Arg Pro Gln Trp Cys Leu Gly Leu Val Ile Ile Val Trp Leu Ser Gly
Phe Met Glu Ala Gly Leu Val Val Ala Leu Thr Ala Gln Leu Arg Phe
                   70
Cys Gly Pro Asn Leu Ile Asp His Phe Tyr Cys Asp Phe Ser Pro Leu
                                   90
Met Ile Leu Ala Cys Ser Asp Thr Xaa Val Ala Gln Met Thr Thr Phe
           100
                               105
Val Leu Phe Val Val Phe Leu Pro Val Leu Ser Gly Leu Ile Leu Met
                                               125
                           120
Ser Tyr Ala Gln Phe Val Val Ile Val Leu Arg Ile Pro Ser Gly Ala
                      135
                                           140
Arg Arg Thr Lys Ala Phe Phe Thr Cys Ser Ser His Leu Ala Met Met
                   150
                                       155
Phe Thr Phe Tyr Gly Ser Leu Met Val Trp Tyr Thr Ala Pro Ser Ala
              165
                                   170
Val Leu Ser Leu Gln Leu Leu Ser Lys Val Ile Ala Leu Leu Tyr Thr
                              185
Val Phe Ala Pro Ile Phe Asn Ser Val Ile Tyr Thr Leu Arg Asn Leu
      195
                          200
                                              205
Asp Met Gln Lys Ala Leu Arg Arg Leu Leu Tyr Cys Lys Ser Thr Glu
                      215
Met Xaa Pro Lys Lys Glu Gly Ser
<210> 2385
<211> 326
<212> PRT
<213> Mus musculus (M149 8574277-6-4252-5644 1059-82)
<220>
<221> VARIANT
<222> (1)...(326)
<223> Xaa = Any Amino Acid
<400>2385
Tyr Ile Val Phe Thr Pro Ile Ser Ser Xaa Asn Thr Arg Pro Thr Met
1 - 5 -
                                  10 -- -- -- 15 --
Asn Cys Ser Gln Ala Pro Thr Phe Ile Leu Leu Gly Leu Ser Ser Asp
                               25
Ala Glu Lys Trp Gln Pro Leu Phe Ser Ile Phe Leu Val Leu Tyr Leu
                           40
                                               45
Leu Gly Leu Leu Gly Asn Leu Leu Leu Leu Ala Ile Gly Thr Asp
                       55
Val His Leu His Thr Pro Met Tyr Phe Phe Leu Ser Gln Leu Ser Leu
                                       75
                   70
Val Asp Leu Cys Phe Ile Thr Thr Thr Ala Pro Lys Met Leu Glu Ala
               85
                                   90
Leu Trp Thr Gly Asp Gly Ser Ile Ser Phe Ser Gly Cys Leu Thr Gln
           100
                               105
Leu Tyr Phe Phe Ala Val Phe Ala Asp Met Asp Asn Leu Leu Ala
                           120
                                               125
Val Met Ala Ile Asp Arg Tyr Ala Ala Ile Cys His Pro Leu Leu Tyr
```

```
135
                                           140
Pro Leu Leu Met Thr Pro Cys Arg Cys Arg Val Leu Val Ser Gly Ser
                                       155
                  150
Trp Gly Val Ala His Cys Val Ser Leu Thr His Thr Leu Leu Phe Ser
                                  170
                                                       175
               165
Lys Leu Tyr Phe His Asn Asn Gln Glu Ile Pro His Phe Cys Asp
                               185
                                                   190
           180
Phe Gly Pro Leu Leu Leu Ser Cys Ser Asp Thr Tyr Leu Asn Glu
                           200
                                               205
       195
Ser Leu Met Met Ala Leu Ser Gly Leu Leu Ala Ile Ser Ala Phe Leu
                       215
                                           220
Cys Ile Val Ser Ser Tyr Gly Cys Ile Phe Tyr Ala Val Ala Lys Val
                   230
                                       235
Pro Ser Ala Gln Gly Lys Arg Lys Ala Leu Ala Thr Cys Ser Ser His
                245
                                   250
Leu Ser Val Val Leu Leu Phe Tyr Ser Thr Val Phe Ala Thr Tyr Leu
                               265
           260
Lys Pro Pro Ser Ser Ser His Ser Ser Gln Glu Val Val Ala Ala Val
       275
                           280
Met Tyr Thr Leu Val Thr Pro Thr Leu Asn Pro Phe Ile Tyr Ser Leu
                      295
                                           300
Arg Asn Lys Asp Val Lys Ser Ser Leu Arg Arg Ile Leu Asn Met Val
                  310
                                       315
Lys Ser Gln Asp Xaa Gly
<210> 2386
<211> 321
<212> PRT
<213> Mus musculus (M152 8574277-7-18987-20418 1032-73)
<220>
<221> VARIANT
<222> (1)...(321)
<223> Xaa = Any Amino Acid
<400>2386
Cys Gly Leu Ser Cys Ser Gln Arg Ser Arg Arg Asn Val Leu Ile Ser
                                   10
Leu Xaa Xaa Leu Asn Phe Phe Leu Met Gly Phe Ser Arg Lys Leu Glu
          20
                               25
Val Glu His Asn Phe Ile Leu Ala Leu Gly Leu Val Ile Leu Ile Ala
                           40
Asn Val Phe Ile Ile Ala Ala Ile Ser Leu Glu Tyr His Leu Cys Ser
                       55
                                           60
Leu Arg His Phe Leu Leu Glu Gln Leu Phe Cys Leu Asp Leu Cys Tyr
                                       75
                   70
Ile Ser Met Ile Val Leu Ser Thr Ile Lys Ser Ile Cys Arg Ser Phe
                                   90
               85
Met Tyr Ser Ala Tyr Ile Ser Leu Ile Glu Cys Thr Leu Gln Gly Phe
                               105
Ala Phe Thr Leu Cys Ser Tyr Thr Ser Met Ala Ile Leu Thr Val Met
                          120
                                               125
Ser Cys His Cys Tyr Val Ile Met Cys Tyr Lys Val Ile Ile Ser Val
                      135
                                          140
Ser Leu Cys Met His Lys Val Leu Ala Val Trp Ala Ser Gly Cys Gly
                  150
                                       155
Ile Asn Phe Gly Val Met His Thr Ala Val Asn Phe Ser Ile Ser Leu
               165
                                   170
Cys Gly Ala Ser Val Ile His Xaa Phe Cys Asn Val Leu Leu Val Leu
                               185
```

```
Lys Leu Ser Cys Ser Asn Asp Cys Val Ser Glu Leu Ser Ile Ile Gly
                            200
 Phe Pro Thr Cys Arg His Phe Ile Ser Ile Ser Phe Ala Tyr Glu His
                        215
 Ile Leu Ser Pro Glu Leu Arg Met Pro Ser Val Lys Gly Arg Thr Arg
                    230
                                        235
 Val Phe Ser Thr Cys Leu Cys His Ile Ser Val Val Ile Leu Phe Ile
                245
                                    250
 Pro Thr Gly Val Phe Glu Phe Leu Asn Pro His Ser Lys Ser Pro Thr
            260
                             265
Xaa Ile Leu His Xaa Thr Leu Phe Leu Val Phe His Thr Phe Leu Ser
                            280
 Ser Thr Leu Asn Pro Glu Ile Asn Ser Leu Arg Asn Glu Ala Thr Glu
                    295
                                            300
His His Ser Lys Glu Asn Val Ser Leu Phe Ile Ser Thr Ile Ser Ser
                    310
                                        315
Leu
<210> 2387
<211> 327
<212> PRT
<213> Mus musculus (M154 8575572-1-103679-105172 492-1471)
<220>
<221> VARIANT
<222> (1)...(327)
<223> Xaa = Any Amino Acid
<400>2387
His Xaa Met Gly Ala Leu Asn Gln Thr Arg Val Thr Glu Phe Ile Phe
                                    10
Leu Gly Leu Thr Asp Asn Trp Val Leu Glu Ile Leu Phe Phe Val Pro
            20
Phe Thr Val Thr Tyr Met Leu Thr Leu Leu Gly Asn Phe Leu Ile Val
                            40
Val Thr Ile Val Phe Thr Pro Arg Leu His Asn Pro Met Tyr Phe Phe
                        55
                                           60
Leu Ser Asn Leu Ser Phe Ile Asp Ile Cys His Ser Ser Val Thr Val
                                       75
Pro Lys Met Leu Glu Gly Leu Leu Leu Glu Arg Lys Thr Ile Ser Phe
               85
Asp Asn Cys Ile Ala Gln Leu Phe Phe Leu His Leu Phe Ala Cys Ser
                               105
Glu Ile Phe Leu Leu Thr Ile Met Ala Tyr Asp Arg Tyr Val Ala Ile
                           120 - - -
Cys Ile Pro Leu His Tyr Ser Asn Val Met Asn Met Lys Val Cys Val
                       135
                                           140
Gln Leu Val Phe Ala Leu Trp Leu Gly Gly Thr Ile His Ser Leu Val
                   150
                                       155
Gln Thr Phe Leu Thr Ile Arg Leu Pro Tyr Cys Gly Pro Asn Ile Ile
               165
                                   170
Asp Ser Tyr Phe Cys Asp Val Pro Pro Val Ile Lys Leu Ala Cys Thr
                               185
Asp Thr Tyr Leu Thr Gly Ile Leu Ile Val Ser Asn Ser Gly Thr Ile
       195
                            200
                                               205
Ser Leu Val Cys Phe Leu Ala Leu Val Thr Ser Tyr Thr Val Ile Leu
                       215
                                           220
Phe Ser Leu Arg Lys Lys Ser Ala Glu Gly Arg Arg Lys Ala Leu Ser
                 230
                                       235
```

Thr Cys Ser Ala His Phe Met Val Val Thr Leu Phe Phe Gly Pro Cys

```
250
                245
Ile Phe Leu Tyr Thr Arg Pro Asp Ser Ser Phe Ser Ile Asp Lys Val
                              265
                                                  270
           260
Val Ser Val Phe Tyr Thr Val Val Thr Pro Leu Leu Asn Pro Leu Ile
                           280
                                               285
Tyr Thr Leu Arg Asn Glu Glu Val Lys Thr Ala Met Lys His Leu Arg
                      295
                                           300
Gln Arg Arg Ile Cys Ser Xaa Asn His Val Cys Val Trp Leu Val Xaa
                   310
                                       315
Cys Cys Asp Asn Ser His Gly
                325
<210> 2388
<211> 330
<212> PRT
<213> Mus musculus (M157 8575572-1-144835-147600 2426-1439)
<220>
<221> VARIANT
<222> (1)...(330)
<223> Xaa = Any Amino Acid
<400>2388
Met Glu Lys Ala Val Leu Ile Asn Gln Thr Ser Val Met Ser Phe Arg
                                   10
               5
Leu Thr Gly Leu Ser Thr Asn Pro Lys Val Gln Met Ala Ile Phe Phe
           20
                               25
Ile Phe Leu Ile Phe Tyr Val Leu Thr Leu Val Gly Asn Ile Leu Ile
                           40
Val Val Thr Ile Ile His Asp His Arg Leu His Thr Pro Met Tyr Phe
                                           60
                        55
Phe Leu Ser Asn Leu Ser Phe Ile Asp Val Cys His Ser Thr Val Thr
                   70
                                       75
Val Pro Lys Met Leu Ser Asp Thr Phe Ser Glu Glu Lys Leu Ile Ser
                                   90
Phe Asp Asp Cys Val Val Gln Ile Phe Phe Leu His Leu Phe Ala Cys
                               105
Thr Glu Ile Phe Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala
                          120
                                               125
Ile Cys Lys Pro Leu Arg Tyr Met Thr Ile Met Asn Trp Lys Val Cys
                       135
                                           140
Met Val Leu Gly Gly Ala Met Trp Thr Ala Gly Thr Ile His Ser Ile
                                       155
                   150
Ser Phe Thr Ser Leu Thr Ile Lys Leu Pro Tyr Cys Gly Pro Asn Glu
                165
                                   170
Leu Asp Ser Phe Phe Cys Asp Val Pro Gln Val Ile Glu Leu Ala Cys
           180
                               185
Thr Asp Thr Arg Ile Thr Glu Ile Leu Val Val Ser Asn Ser Gly Met
                           200
Ile Ser Met Val Cys Phe Val Ile Ile Val Val Ser Tyr Ala Val Ile
                       215
                                           220
Leu Val Ser Leu Arg Gln Gln Ile Ser Asp Gly Lys Arg Lys Ala Leu
                  230
                                       235
Ser Thr Cys Ala Ala His Leu Thr Val Val Thr Leu Phe Leu Gly His
                                   250
               245
Cys Ile Phe Ile Tyr Ser Arg Pro Ala Ile Ser Leu Pro Glu Asp Lys
                               265
           260
Ile Val Ser Ala Phe Phe Thr Ala Ile Thr Pro Leu Leu Asn Pro Ile
                           280
Ile Tyr Thr Phe Arg Asn Glu Asp Met Lys Ser Ala Leu Lys Lys Leu
                       295
                                           300
```

```
Ile Arg Arg Lys Glu Gly Lys Glu Lys Xaa Lys Cys Ile Ser Ser Leu
                    310
 Gly Phe Leu Val Ile Xaa Ile Lys Glu Ala
                 325
 <210> 2389
 <211> 331
 <212> PRT
 <213> Mus musculus (M158 8575572-1-18114-22131 1498-507)
 <220>
 <221> VARIANT
 <222> (1)...(331)
 <223> Xaa = Any Amino Acid
<400>2389
Cys Leu Ser Ala Ser Leu Asp Ile Ser Lys Met Glu Arg Ile Asn Tyr
                                    10
Thr Val Leu Thr Glu Phe Ile Leu Thr Gly Val Pro His Pro Pro Arg
                                25
Leu Arg Thr Phe Leu Phe Val Phe Phe Leu Leu Ile Tyr Ile Leu Thr
        35
                            40
Gln Leu Gly Asn Ala Leu Ile Leu Ile Thr Val Cys Ala Asp Thr Gln
                        55
Leu His Ala Arg Pro Met Tyr Ile Phe Leu Gly Ala Leu Ser Val Ile
                    70
                                        75
Asp Met Gly Ile Ser Thr Ile Ile Val Pro Arg Leu Met Met Asn Phe
                                    90
Thr Pro Gly Ile Lys Pro Ile Pro Phe Gly Gly Cys Val Ala Gln Leu
           100
                                105
Tyr Phe Tyr His Phe Leu Gly Ser Ser Gln Cys Phe Leu Tyr Thr Thr
        115
                           120
Met Ala Tyr Asp Arg Tyr Leu Ala Ile Cys Gln Pro Leu Arg Tyr Pro
                       135
                                            140
Val Leu Met Ser Ala Lys Leu Ser Ile Leu Leu Val Ala Gly Ala Trp
                    150
                                        155
Val Ala Gly Ser Ile His Gly Ala Ile Gln Ala Ile Leu Thr Phe Arg
                165
                                    170
Leu Pro Tyr Cys Gly Pro Asn Gln Val Asp Tyr Phe Phe Cys Asp Ile
            180
                                185
                                                    190
Pro Ala Val Leu Lys Leu Ala Cys Ala Asp Thr Thr Val Asn Glu Leu
                            200
                                                205
Val Thr Phe Val Asp Ile Gly Val Val Val Ala Ser Cys Phe Ser Leu
                        215
                                            220
Ile Leu Leu Ser Tyr Ile Tyr Ile Ile Arg Ala Ile Leu Arg Ile Arg
                 230
                                      235
Thr Ala Asp Gly Arg Arg Ala Phe Ser Thr Cys Gly Ala His Val
                245
                                    250
Thr Ile Val Thr Val Tyr Val Pro Cys Ala Phe Ile Tyr Leu Arg
            260
                                265
                                                    270
Pro Asp Ser His Ser Ile Leu Asp Gly Ala Ala Ala Leu Phe Pro Thr
       275
                            280
                                               285
Ala Ile Thr Pro Phe Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Gln
                       295
                                           300
Glu Val Lys Leu Ala Leu Arg Arg Met Val Gly Ser Gln Ser Thr Lys
                   310
                                        315
Ser Glu Val Xaa Ala Pro Leu Leu Phe Xaa Gly
               325
<210> 2390
<211> 324
```

1444

```
<212> PRT
<213> Mus musculus (M160 8575572-1-54180-57203 1450-479)
<220>
<221> VARIANT
<222> (1)...(324)
<223> Xaa = Any Amino Acid
<400>2390
Ile Leu Thr Asp Xaa Asp Met Arg Arg Thr Arg Asn Thr Ser Leu Asp
               5
1
Ala Val Val Thr Asp Phe Leu Leu Leu Gly Leu Ala His Pro Pro Asn
                               25
           20
Leu Arg Ala Phe Leu Phe Leu Val Phe Phe Leu Ile Tyr Ile Leu Thr
                                               45
                           40
Gln Leu Gly Asn Leu Leu Ile Leu Leu Thr Val Trp Ala Asp Pro Lys
                                           60
                       55
Leu His Ala Arg Pro Met Tyr Ile Leu Leu Gly Val Leu Ser Phe Leu
                                       75
                   70
Asp Met Trp Leu Ser Ser Val Ile Val Pro Arg Leu Ile Leu Asn Phe
                                    90
               85
Thr Pro Ala Ser Lys Ala Ile Pro Phe Gly Gly Cys Val Ala Gln Leu
                                                    110
           100
                               105
Tyr Phe Phe His Phe Leu Gly Ser Thr Gln Cys Phe Leu Tyr Thr Leu
                                               125
                           120
       115
Met Ala Tyr Asp Arg Tyr Leu Ala Ile Cys Gln Pro Leu Arg Tyr Pro
                                           140
                       135
Val Leu Met Asn Gly Lys Leu Cys Thr Ile Leu Val Ser Gly Ala Trp
                                       155
                   150
Val Ala Gly Ser Ile His Gly Ser Ile Gln Thr Thr Leu Thr Phe Arg
                                   170
               165
Leu Pro Tyr Cys Gly Pro Asn Gln Ile Asp Tyr Phe Ile Cys Asp Ile
                               185
                                                   190
Pro Ala Val Leu Arg Leu Ala Cys Ala Asp Thr Thr Val Asn Glu Leu
                                                205
                           200
Val Thr Phe Val Asp Ile Gly Val Val Ala Ala Ser Cys Phe Met Leu
                                            220
                       215
Ile Leu Leu Ser Tyr Ala Asn Ile Val His Ala Ile Leu Lys Ile Arg
                                       235
                    230
Thr Ala Asp Gly Arg Lys Arg Ala Phe Ser Thr Cys Gly Ser His Leu
                                    250
                245
Thr Val Val Thr Val Tyr Tyr Val Pro Cys Ile Phe Ile Tyr Leu Arg
                               265
                                                    270
            260
Ala Gly Ser Lys Ser Pro Phe Asp Gly Ala Val Ala Val Phe Tyr Thr
                           280
                                               285
Val Val Thr Pro Leu Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Gln
                                           300
                       295
Glu Val Lys Ser Ala Leu Lys Arg Leu Thr Ala Gly Arg Arg Asp Val
                                       315
                    310
Gly Gly Glu Lys
<210> 2391
<211> 329
<212> PRT
<213> Mus musculus (M162 8576192-11-46369-50310 3151-2165)
<220>
<221> VARIANT
<222> (1)...(329)
<223> Xaa = Any Amino Acid
```

Š

```
<400>2391
Phe Ser Xaa Ser His Tyr Arg Gln Asn Met Thr Gly Asn Asn Gln Thr
                                    10
Leu Ile Ser Lys Phe Leu Leu Gly Leu Pro Ile Leu Ser Glu Tyr
            20
                                25
His Phe Leu Phe Tyr Ala Leu Phe Leu Ala Met Tyr Leu Thr Thr Ile
                            40
Leu Gly Asn Leu Leu Ile Ile Ala Leu Val Arg Leu Asp Ser His Leu
                        55
His Thr Pro Met Tyr Leu Phe Leu Ser Asn Leu Ser Phe Ser Asp Leu
                    70
                                       75
Cys Phe Ser Ser Val Thr Ile Pro Lys Leu Leu Gln Asn Met Gln Ser
               85
                                    90
Gln Val Pro Ser Ile Ser Tyr Val Gly Cys Leu Thr Gln Leu Tyr Phe
            100
                               105
                                                   110
Phe Met Val Phe Gly Asp Met Glu Ser Phe Leu Leu Val Val Met Ala
                            120
Tyr Asp Arg Tyr Val Ala Ile Cys Phe Pro Leu His Tyr Thr Ser Ile
                        135
                                            140
Met Ser Thr Lys Phe Cys Thr Ser Leu Val Leu Leu Trp Met Leu
                   150
                                       155
Thr Thr Ser Asn Ala Leu Met His Thr Leu Leu Met Ala Arg Leu Ser
               165
                                   170
Phe Cys Glu Lys Asn Val Ile Leu Arg Phe Phe Cys Asp Ile Ser Ala
           180
                               185
Leu Leu Lys Leu Ser Cys Ser Asp Thr Phe Val Asn Glu Leu Met Ile
                           200
       195
                                              205
Phe Ile Met Gly Gly Ile Ile Ile Ile Pro Phe Leu Leu Ile Val
                       215
                                           220
Met Ser Tyr Val Arg Ile Phe Phe Ser Ile Leu Lys Val Pro Ser Thr
                   230
                                       235
Gln Gly Ile His Lys Val Phe Ser Thr Cys Gly Ser His Leu Ser Val
                                   250
                245
Val Ser Leu Phe Tyr Gly Thr Ile Ile Gly Leu Tyr Leu Cys Pro Ser
                               265
                                                   270
Ser Asn Asn Ser Thr Val Lys Glu Ser Ala Met Ala Met Met Tyr Thr
                           280
                                               285
Val Val Thr Pro Met Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn Arg
                       295
                                          300
Asp Met Lys Arg Ala Leu Ile Arg Val Ile Cys Ser Lys Lys Ile Ser
                   310
                                       315
Leu Xaa Trp Lys Tyr Phe Arg Met Ile
               325
<210> 2392
<211> 275
<213> Mus musculus (M163 8576192-5-7971-9031 1060-236)
<220>
<221> VARIANT
<222> (1)...(275)
<223> Xaa = Any Amino Acid
<400>2392
Ile Ile Leu Ile Ile Leu Asp Phe His Leu His Thr Pro Ile Tyr
1
                5
                                   10
Leu Phe Leu Ser Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val
           20
                               25
```

Thr Met Pro Lys Leu Leu Gln Asn Met Gln Ser Gln Asp Thr Thr Ile

```
40
Ser Tyr Val Gly Cys Leu Thr Gln Met Tyr Phe Pro Asn Val Phe Ala
                       55
                                           60
Asn Leu Glu Asn Phe Leu Leu Met Phe Met Ala Tyr Asp Arg Tyr Val
                   70
                                       75
Ala Ile Cys Tyr Pro Leu Arg Tyr Thr Ser Ile Met Ser Pro Ile Leu
                                   90
               85
Cys Val Cys Met Val Phe Met Ser Trp Leu Leu Thr Met Leu Asn Ser
                                105
                                                    110
           100
Thr Leu His Thr Val Leu Ile Val Lys Leu Ser Phe Cys Glu Asp Asn
                            120
Val Ile Pro His Phe Phe Cys Asp Ile Ser Ala Val Leu Lys Leu Ala
                       135
                                           140
Cys Ser Asp Ile Tyr Ile Asn Glu Leu Thr Ile Phe Ile Thr Gly Ala
                   150
                                       155
Phe Ile Ile Val Ile Pro Phe Leu Leu Ile Val Val Ser Tyr Val Gln
                                   170
               165
Ile Val Cys Ser Ile Leu Lys Phe Ser Ser Thr Arg Gly Ile Ala Lys
           180
                               185
Ile Phe Ser Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr
                           200
                                               205
Gly Thr Ile Ile Gly Leu Tyr Leu Cys Pro Ser Thr Asn Asn Ser Thr
                       215
                                           220
Val Lys Asp Thr Ala Met Ala Met Tyr Thr Val Val Thr Pro Met
                   230
                                       235
Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys Glu Ala
                                    250
               245
Leu Ile Arg Val Leu Cys Lys Glu Ile Ser Leu Xaa Trp Gln Tyr
                                265
Leu His Leu
       275
<210> 2393
<211> 327
<212> PRT
<213> Mus musculus (M165 8576192-7-12279-14147 678-1658)
<220>
<221> VARIANT
<222> (1)...(327)
<223> Xaa = Any Amino Acid
<400>2393
Trp Arg Ile Arg Met Ile Ile Asn Asn Gln Thr Ala Ile Pro Gln Phe
                                   10
Ile Leu Leu Gly Leu Pro Ile Leu Pro Glu Gln Gln Met Phe Tyr
           20
                               25
Ala Leu Phe Leu Ala Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Ile
                           40
Ile Ile Ile Leu Ile Arg Leu Asp Ser His Leu His Thr Pro Met Tyr
Leu Phe Leu Ser Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val
                  70
                                       75
Thr Met Pro Lys Leu Leu Gln Asn Ile Gln Ser Gln Asp Pro Ser Ile
                                   90
Ser Tyr Ala Gly Cys Leu Thr Gln Met Tyr Phe Phe Met Val Phe Ala
                               105
           100
Asn Thr Glu Asn Val Leu Leu Val Val Met Ala Tyr Asp Arg Tyr Val
                           120
                                               125
Ala Ile Cys Phe Pro Leu His Tyr Thr Ser Ile Met Ser Pro Lys Leu
                       135
```

```
Cys Val Ser Leu Val Val Leu Thr Trp Val Phe Thr Val Leu Tyr Ser
                    150
                                         155
 Met Leu His Thr Leu Leu Leu Ala Arg Leu Ser Phe Cys Glu Asp Asn
                 165
                                     170
 Val Ile Thr His Phe Phe Cys Asp Ile Ser Ala Leu Leu Lys Leu Ala
             180
                                185
                                                     190
 Cys Ser Asp Thr Tyr Ile Asn Glu Leu Met Ile Phe Ile Leu Gly Thr
                             200
Leu Asp Thr Val Val Pro Phe Leu Leu Ile Val Val Ser Tyr Val Gln
                         215
                                             220
Ile Val Cys Ser Ile Leu Lys Phe Ser Thr Lys Gln Gly Ile Ala Lys
                     230
                                        235
Val Phe Ser Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr
                245
                                    250
Gly Thr Ile Ile Gly Val Tyr Leu Cys Pro Ser Ala Asn Asn Ser Thr
            260
                                265
Val Lys Glu Ile Val Met Ala Leu Met Tyr Thr Val Val Thr Pro Met
        275
                            280
                                                 285
Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn Arg Asp Ile Lys Glu Ala
                        295
                                            300
Leu Ile Arg Val Leu Cys Lys Lys Gln Ile Pro Leu Xaa Cys Leu Tyr
                    310
                                        315
Trp Asn Phe Xaa Ile Xaa Ile
<210> 2394
<211> 316
<212> PRT
<213> Mus musculus (M166 8576192-8-1-1469 247-1198)
Arg Gly Arg Met Val Met Asn Asn Gln Thr Val Ile Ser Gln Leu Leu
                                    10
Leu Val Gly Leu His Ile Pro Pro Asp His Gln Gln Gly Phe Tyr Thr
                                25
Leu Phe Leu Ala Met Tyr Leu Thr Thr Ile Leu Gly Asn Leu Ile Ile
                            40
Ile Pro Leu Ile Ile Met Asp Ser Pro Phe Pro Thr His Pro Met Tyr
                        55
                                            60
Leu Phe Leu Ile Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val
                    70
                                        75
Thr Val Pro Lys Leu Leu Gln Asn Met Gln Ser Gln Asp Thr Ser Ile
                85
                                    90
Ser Tyr Ala Gly Cys Leu Thr Gln Met Tyr Phe Leu Met Val Phe Gly
            100
                                105
Asp Met Glu Ser Phe Leu Leu-Val Val Met Ala Tyr Asp Arg Tyr Val
        115
                            120
                                                125
Ala Ile Cys Phe Pro Leu His Tyr Thr Ser Thr Met Ser Pro Lys Phe
                        135
                                            140
Cys Val Cys Val Gly Ala Leu Ser Trp Val Phe Thr Ile Met Tyr Ser
                    150
                                        155
Met Val His Thr Leu Leu Ser Arg Leu Ser Phe Cys Glu Asp Asn
                165
                                    170
Val Ile Pro His Phe Phe Cys Asp Leu Ser Ala Leu Leu Lys Leu Ala
            180
                                185
Cys Ser Asp Ile Phe Ile Asn Glu Leu Met Ile Phe Ile Leu Gly Gly
                            200
                                                205
Pro Val Val Ala Ile Pro Phe Leu Leu Ile Val Val Ser Tyr Val Arg
                       215
                                           220
Ile Val Ser Ser Ile Leu Lys Val Ser Ser Ser Gln Gly Ile His Lys
                                        235
```

```
Ile Phe Ser Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr
                245
                                    250
 Gly Thr Ile Ile Gly Leu Tyr Leu Cys Pro Ser Ala Asn Asn Ser Thr
            260
                                265
 Val Lys Lys Ile Ala Met Ala Met Tyr Thr Val Val Thr Pro Met
                            280
        275
 Leu Asn Pro Phe Ile Tyr Ser Leu Arg Ser Arg Asp Met Lys Glu Ala
                       295
                                           300
 Leu Ile Arg Val Leu Cys Lys Lys Ile Ser Leu
                    310
 <210> 2395
 <211> 244
 <212> PRT
 <213> Mus musculus (M167 8576192-8-6530-9303 730-2)
<220>
 <221> VARIANT
<222> (1)...(244)
 <223> Xaa = Any Amino Acid
<400>2395
Tyr Leu Ser Arg Gly Leu Pro Ser Phe Glu Gly Leu Thr Gln Ala Xaa
 1
                5
                                    10
Leu Asn Thr Xaa Ser Asn His His Ile Pro Thr Ile Val His Arg Thr
          20
                                25
Ile Asp Asp Ile Cys Asn Ser Phe Xaa Cys Leu Phe Phe Ala Leu Gly
                           40
Ser Asn Pro Leu Phe Gln Met Ser Gln Lys Tyr Cys Ile Xaa Xaa Tyr
Ile Gly Asn Leu His Ser Lys Gly Ile Tyr Ile Phe Asn Gly Leu Thr
                   70
                                       75
Ser Ile Arg Leu Leu Gln Ile Ile Leu Thr Phe Leu Ser Met Lys Ala
               85
                                   90
Leu Cys Ser Ser Pro Lys Phe Ser Asn Ile Leu Ser Cys Ser Ser Ala
            100
                               105
Leu Leu Leu Ile Lys Ser Lys Ser Phe Val Ser Asn Xaa Tyr His Leu
                           120
                                               125
Thr His Ile Glu Cys Xaa Leu Tyr Ser Leu Asn Ser Ile Leu His Arg
                       135
                                           140
Tyr Tyr Ala Leu Val Met Lys Cys Ser Gln Asn Ser Tyr Ile Glu Ser
                   150
                                       155
Leu Val Leu Asp Ala Met Phe Arg Gly Gly Ser Gly Arg His Gly Gly
               165
                                   170
Val Phe Lys Thr Leu Thr His Gln Leu Ser Pro Leu Ile Pro Lys Val
           180
                               185
Xaa Ser Ser Met Gly Ile His Lys Ala Phe Ser Thr Ser Gly Ser Asp
      195
                          200
                                               205
Arg Asp Leu Ser Met Val Ser Val Tyr Tyr Gly Lys Val Ile Asp Leu
                       215
                                          220
Phe Leu Ser Pro Ser Ser Asn Met Asn Thr Met Lys Glu Thr Ile Ile
                  230
                                       235
Ser Val Met Tyr
<210> 2396
<211> 338
<212> PRT
<213> Mus musculus (M168 8576195-11-1440-4165 2456-1443)
<220>
```

```
<221> VARIANT
<222> (1)...(338)
<223> Xaa = Any Amino Acid
<400>2396
Cys Xaa Xaa His Phe Ile Leu Ser Leu Leu Gln Met Lys Val Met Lys
                                   10
Gln Met Val Thr Glu Ser Asn Ser Ser Val Thr Glu Phe Ile Leu Met
                               25
           20
Gly Leu Thr Val Gln Lys Glu Leu Gln Leu Pro Leu Phe Ile Leu Phe
                           40
Leu Leu Asn Tyr Thr Ala Thr Val Val Gly Asn Leu Ser Leu Met Asn
                                           60
                       55
Leu Ile Cys Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Ile
                                       75
Phe Asn Leu Ser Cys Ile Asp Phe Cys Tyr Ser Phe Val Ser Asn Pro
                                   90
Thr Met Leu Arg Ser Phe Val Thr Glu Gln Asn Thr Ile Ser Tyr Glu
           100
                               105
Gly Cys Met Ser Gln Leu Phe Phe Phe Cys Phe Phe Val Asn Ser Glu
                          120
                                               125
       115
Cys Tyr Val Leu Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys
                                           140
                       135
His Pro Leu Lys Tyr Thr Thr Val Met Ser Pro Lys Ile Cys Cys Leu
                   150
                                       155
Leu Val Phe Gly Ser Tyr Leu Met Gly Phe Ala Gly Ala Leu Thr His
                                   170
               165
Thr Gly Phe Met Ile Arg Leu Ser Phe Cys Asn Ser Asn Ile Ile Asn
                               185
                                                  190
His Tyr Met Cys Asp Ile Phe Pro Leu Leu Gln Leu Ser Cys Thr Ser
                           200
Thr Tyr Val Asn Glu Leu Val Ser Ser Ala Val Val Gly Thr Ile Ile
                                           220
    210
                       215
Ile Leu Ser Ser Ile Ile Ile Leu Val Ser Tyr Ala Met Ile Leu Ser
                   230
                                       235
Asn Ile Leu His Met Ser Ser Ser Lys Gly Trp Ser Lys Ala Leu Gly
               245
                                   250
Thr Cys Gly Ser His Ile Ile Thr Val Ser Leu Phe Tyr Gly Ser Gly
                               265
Leu Leu Ala Tyr Ile Lys Pro Thr Ser Ala Glu Thr Val Asp Gln Gly
                                               285
                           280
Lys Phe Leu Ser Ile Phe Tyr Thr Leu Val Val Pro Met Leu Asn Pro
                                           300
                      295
Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Leu Ala Leu Lys Arg
                  310
                                       315
Thr Met Lys Arg Val Thr Thr Xaa Met Asn Ser Cys Ala Phe Ile Val
               325
                                   330
Leu Pro
<210> 2397
<211> 340
<212> PRT
<213> Mus musculus (M169 8576195-13-2329-4897 1250-2268)
<220>
<221> VARIANT
<222> (1)...(340)
<223> Xaa = Any Amino Acid
```

<400>2397

```
Ile Ser Cys Leu Val Val Ser Pro Ser Ile Leu Gln Thr Ser His Thr
                                  10
Lys Gln Ile Thr Met Glu Asn Asp Ser Phe Val Ser Glu Phe Ile Leu
                               25
           20
Met Gly Leu Thr Asp His Pro Glu Leu Gln Leu Ser Leu Phe Val Leu
                           40
Phe Leu Met Asn Tyr Thr Ala Ile Val Met Gly Asn Leu Ser Leu Met
                       55
Ile Leu Ile Phe Leu Asn Ser Asn Leu His Thr Pro Met Tyr Phe Phe
                   70
Ile Phe Asn Leu Ser Phe Ile Asp Phe Cys Tyr Ser Phe Val Phe Thr
                                   90
Pro Lys Met Leu Met Ser Phe Phe Leu Glu Lys Asn Thr Ile Ser Phe
                               105
           100
Arg Gly Cys Met Thr Gln Leu Phe Phe Phe Cys Phe Phe Val Asn Ser
                                               125
                           120
       115
Glu Ser Tyr Val Leu Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile
                       135
                                           140
Cys Lys Pro Leu Leu Tyr Lys Thr Ile Met Val Pro Arg Ile Cys Cys
                                       155
                  150
Leu Leu Met Phe Val Ser Tyr Leu Ile Gly Phe Thr Ser Ala Met Ile
                                   170
               165
Leu Thr Gly Leu Met Phe Arg Leu Asn Phe Cys Asn Asn His Ile Ile
                              185
          180
Asn His Tyr Met Cys Asp Ile Phe Pro Val Ile Gln Ile Ser Cys Ser
                           200
                                               205
       195
Asp Thr Tyr Leu Asn Glu Leu Val Ser Thr Ala Val Val Gly Thr Gly
                       215
Ile Ile Leu Cys Ser Leu Leu Ile Leu Met Ser Tyr Ala Leu Ile Leu
                   230
                                       235
Phe Asn Ile Leu Asn Met Ser Ser Gly Lys Gly Trp Ser Lys Ala Met
                                   250
               245
Gly Thr Cys Gly Ser His Ile Ile Thr Val Ser Leu Phe Tyr Gly Ser
                                                   270
                               265
           260
Gly Leu Leu Ala Tyr Val Lys Pro Ser Ser Ala Glu Thr Val Gly Gln
                           280
                                               285
Gly Lys Phe Phe Ser Leu Phe Tyr Thr Phe Leu Val Pro Met Leu Asn
                                           300
            . 295
Pro Leu Ile Tyr Ser Leu Gln Asn Lys Asp Val Lys Val Ala Val Lys
               310
                                       315
Lys Thr Leu Lys Arg Ile Ser Asn Xaa Leu Glu Pro Leu Ala Leu His
              325
Arg Thr Leu Ser
           340
<210> 2398
<211> 336
<212> PRT
<213> Mus musculus (M171 8576195-15-1361-3546 1172-2177)
<220>
<221> VARIANT
<222> (1)...(336)
<223> Xaa = Any Amino Acid
<400>2398
Phe Xaa Leu Met Leu Leu Gln Met Gln His Met Lys Gln Met Ile Met
               5
                                   10
Glu Asn Asp Ser Ser Val Ser Glu Phe Ile Leu Met Gly Leu Thr Tyr
                               25
Gln Pro Glu Leu Trp Trp Pro Leu Phe Val Leu Phe Leu Val Asn Tyr
```

```
40
 Thr Ala Thr Val Met Gly Asn Leu Ser Leu Met Thr Leu Ile Cys Leu
                        55
                                            60
 Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Ile Leu Asn Leu Ser
                    70
                                        75
 Phe Ile Asp Phe Cys Tyr Ser Phe Val Phe Thr Pro Lys Met Leu Met
                                    90
Gly Phe Val Ser Glu His Asn Thr Ile Ser Phe Thr Gly Cys Met Thr
                               105
Gln Leu Phe Phe Cys Leu Phe Val Asn Ser Glu Cys Tyr Val Leu
                           120
                                                125
 Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Arg Pro Leu Leu
                        135
                                           140
Tyr Thr Val Val Met Ser Pro Arg Ala Cys Ser Leu Leu Met Leu Ala
                    150
                                       155
Ala His Leu Met Gly Val Ser Ser Ala Val Val His Thr Gly Cys Ile
                165
                                    170
Ile Gln Leu Arg Phe Cys Gly Ser Lys Val Ile Asn His Tyr Met Cys
            180
                                185
                                                    190
Asp Thr Phe Pro Leu Leu Glu Leu Ser Cys Gly Ser Ser His Val Asn
       195
                            200
                                                205
Glu Leu Val Ser Ser Val Ser Val Ala Val Val Val Ile Ser Ser
                       215
                                            220
Leu Ile Ile Val Ser Ser Tyr Ala Leu Ile Leu Val Asn Val Ile His
                   230
                                        235
Leu Ser Ser Ser Lys Gly Trp Ser Lys Ala Val Ser Thr Cys Ser Ser
               245
                                   250
His Ile Ile Thr Val Ala Leu Phe Tyr Gly Phe Gly Leu Leu Ala His
            260
                               265
Ile Lys Pro Ser Ser Ala Glu Ser Val Val Gln Arg Lys Phe Phe Ser
                           280
                                                285
Val Val Tyr Thr Phe Val Leu Pro Leu Leu Asn Pro Leu Ile Tyr Ser
                        295
                                            300
Ser Gly Asn Lys Asp Phe Lys Leu Leu Gly Thr Ile Asp Arg Leu Ala
                    310
                                        315
Gly Ser Asn Leu Ala Ser Phe Phe Phe Leu Ser Pro Leu Leu Ser Lys
                325
                                    330
<210> 2399
<211> 326
<212> PRT
<213> Mus musculus (M172 8576195-20-3387-5132 199-1176)
<220>
<221> VARIANT
<222> (1)...(326)
<223> Xaa = Any Amino Acid
<400>2399
Ile Leu Thr Asp Met Thr Xaa Glu Gly Met Ala Ser Gly Asn Asp Ser
                                    10
Thr Thr Val Lys Glu Phe Ile Leu Leu Gly Leu Thr Gln Gln Pro Glu
           20
Leu Gln Leu Pro Phe Phe Phe Leu Phe Leu Gly Ile Tyr Val Val Ser
Ile Val Gly Asn Leu Gly Leu Ile Val Leu Ile Val Leu Asn Pro His
                       55
                                           60
Leu His Thr Pro Met Tyr Tyr Phe Leu Phe Asn Leu Ser Phe Ile Asp
                   70
                                       75
Phe Cys Tyr Ser Ser Val Ile Thr Pro Lys Met Leu Val Gly Phe Val
                                   90
```

```
Lys Gln Asn Ile Ile Ser His Ala Glu Cys Met Thr Gln Leu Phe Phe
                               105
Phe Ala Phe Phe Val Ile Asp Glu Cys Cys Ile Leu Thr Ala Met Ser
                            120
                                                125
Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu Leu Tyr Lys Val Thr
                       135
                                            140
Met Ser Tyr Gln Val Cys Phe Met Met Thr Val Ser Val Tyr Met Met
                                        155
                   150
Gly Phe Val Gly Ala Ile Ala His Thr Ile Cys Met Leu Arg Leu Thr
                                    170
               165
Phe Cys Asp Gly Asn Ile Ile Asn His Tyr Met Cys Asp Ile Pro Pro
                               185
            180
Leu Leu Lys Leu Ser Cys Thr Asn Thr Ser Val Asn Glu Leu Val Val
                            200
Phe Ile Val Val Gly Val Asn Val Ile Gly Pro Thr Leu Ile Ile Phe
                                            220
                       215
Thr Ser Tyr Thr Leu Ile Ile Phe Asn Ile Ser His Ile Arg Ser Thr
                   230
                                       235
Glu Gly Arg Ser Lys Ala Ile Ser Thr Cys Ser Ser His Ile Ile Ala
                                   250
               245
Val Ser Ile Phe Phe Gly Ala Ser Ala Phe Met Tyr Leu Lys Pro Ser
                               265
                                                  270
Pro Val Gly Ser Val Gly Glu Asp Lys Val Ser Thr Val Phe Tyr Thr
                                                285
                           280
       275
Ile Val Gly Pro Met Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn Lys
                       295
Asp Val His Ile Ala Leu His Lys Thr Leu Lys Lys Ser Met Leu Ile
                                       315
                    310
Xaa Ile Glu Thr Phe Phe
                325
<210> 2400
<211> 337
<212> PRT
<213> Mus musculus (M174 8576195-24-446-3721 1969-959)
<221> VARIANT
<222> (1)...(337)
<223> Xaa = Any Amino Acid
<400>2400
Leu Leu Phe Leu Gln Arg Pro Ser Met Lys Gln Met Ala Thr Lys Asn
                                    10
Asp Ser Ser Val Ser Glu Phe Ile Leu Met Gly Leu Thr Asp Gln Pro
            20
                               25
Glu Leu Gln Leu Pro Leu Phe Phe Leu Phe Leu Leu Asn His Thr Val
                            40
       35
Ile Val Val Gly Asn Leu Ser Leu Met Ser Leu Ile Ile Leu Asn Ser
                                           60
                       55
Asn Leu His Thr Pro Met Tyr Phe Phe Leu Phe Asn Leu Ser Phe Ile
                                       75
                   70
Asp Phe Cys Tyr Ser Phe Val Phe Thr Pro Lys Met Leu Met Ser Phe
               85
                                   90
Val Ser Glu Lys Asn Ile Ile Pro Phe Thr Gly Cys Met Thr Gln Leu
                               105
           100
Phe Phe Phe Cys Phe Phe Ala His Ser Glu Ser Trp Val Leu Thr Val
```

125

120

135

Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu Leu Tyr Lys

Ala Ile Met Leu Pro Arg Ile Cys Cys Leu Leu Met Phe Val Ser Tyr

```
150
                                         155
 Leu Ile Gly Phe Ala Ser Ala Met Val Leu Ala Gly Leu Met Ile Arg
                 165
                                     170
 Leu Asn Phe Cys Asn Asn Ile Ile Asn His Tyr Met Cys Asp Ile
             180
                                 185
                                                     190
 Phe Pro Val Leu Arg Ile Ser Cys Ser Asn Thr Tyr Leu Asn Glu Leu
                             200
                                                 205
 Val Ser Thr Ala Val Val Gly Thr Ala Ile Ile Leu Cys Ser Leu Ile
                         215
 Ile Phe Ile Ser Tyr Ala Met Ile Leu Phe Asn Ile Val His Met Ser
                    230
                                        235
 Ser Gly Lys Gly Trp Ser Lys Ala Leu Gly Thr Cys Gly Ser His Ile
                245
                                    250
 Ile Thr Val Ser Phe Phe Tyr Gly Ser Gly Leu Leu Ala Tyr Val Lys
                                 265
                                                     270
 Pro Ser Ser Ala Glu Thr Val Gly Gln Gly Lys Phe Phe Ser Val Phe
         275
                             280
                                                 285
 Tyr Thr Phe Leu Val Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg
                        295
                                             300
Asn Lys Asp Val Lys Val Ala Val Lys Lys Thr Ile Lys Arg Ile Thr
                   310
                                         315
 Ser Xaa Leu Lys Gln Phe Glu Leu Val Cys Phe His Phe Leu Ser Ile
                325
                                     330
Ile
<210> 2401
<211> 325
<212> PRT
<213> Mus musculus (M175 8576195-26-1-5230 3083-4056)
<220>
<221> VARIANT
<222> (1)...(325)
<223> Xaa = Any Amino Acid
Leu Phe Ser Ser Arg Phe Ser Met Ile Ser Met Leu Ala Gly Asn Gly
                                    10
Ser Ser Val Thr Glu Phe Val Leu Ala Gly Leu Thr Asp Arg Pro Glu
                                25
Leu Gln Leu Pro Leu Phe Tyr Leu Phe Leu Ile Ile Tyr Ile Ile Thr
                            40
Val Val Gly Asn Leu Gly Leu Ile Ile Leu Ile Gly Leu Asn Pro His
                        55
                                            60
Leu His Thr Pro Met Tyr Tyr Phe Leu Phe Asn Leu Ser Phe Ile Asp
                    70
                                        75
Leu Cys Tyr Ser Ser Val Phe Ser Pro Lys Met Leu Ile Asn Phe Val
                                    90
Ser Glu Lys Asn Ser Ile Ser Tyr Ala Gly Cys Met Thr Gln Leu Phe
            100
                                105
                                                    110
Leu Phe Leu Phe Phe Val Ile Ser Glu Cys Tyr Met Leu Thr Ser Met
                            120
                                                125
Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu Leu Tyr Lys Val
                        135
                                            140
Thr Met Ser Pro Gln Ile Cys Ser Val Ile Ser Phe Ala Ala Tyr Gly
                   150
                                        155
Met Gly Phe Ala Gly Ser Ser Ala His Thr Gly Cys Met Leu Arg Leu
               165
                                   170
                                                       175
Thr Phe Cys Asn Val Asn Val Ile Asn His Tyr Leu Cys Asp Ile Leu
                                185
```

```
Pro Leu Gln Leu Ser Cys Thr Ser Thr Tyr Val Asn Glu Val Val
                            200
Val Leu Ile Val Val Gly Ile Asn Ile Thr Val Pro Ser Phe Thr Ile
                        215
                                            220
Leu Ile Ser Tyr Val Phe Ile Leu Ala Asn Ile Leu Asn Ile Lys Ser
                    230
                                        235
Thr Gln Gly Arg Ala Lys Ala Phe Ser Thr Cys Ser Ser His Ile Met
                245
                                    250
Ala Ile Ser Leu Phe Phe Gly Ser Ala Ala Phe Met Tyr Leu Lys Tyr
                                265
            260
Ser Ser Gly Ser Met Glu Gln Gly Lys Ile Ser Ser Val Phe Tyr Thr
                           280
       275
Asn Val Gly Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys
                                            300
                       295
Asp Val Lys Val Ala Leu Arg Lys Ser Leu Ile Lys Ile Gln Arg Lys
                    310
                                       315
Asp Arg Phe Xaa Leu
<210> 2402
<211> 204
<212> PRT
<213> Unknown (p124-dir-0-7 conceptual translation of range 2-613)
Phe Leu Glu Phe Ala Phe Thr Pro Ala Cys Ile Leu Arg Phe Pro Val
                                    10
Thr Ile Val Thr Gly Asp Arg Thr Ile Ser Phe Ser Asn Cys Phe Phe
            20
                                25
Phe Gln Leu Phe Phe Ile Phe Leu Gly Val Met Glu Phe Phe Leu Leu
                            40
Ala Pro Thr Ser Tyr Asp Cys Tyr Val Ala Ile Cys Arg Pro Leu His
                       55
                                            60
His Ser Thr Val Met Thr Arg Gly Val Cys Thr Leu Leu Val Leu Ser
                    70
                                        75
Ser Phe Leu Ser Thr Tyr Leu Asn Leu Phe Pro Pro Val Val Met Asp
                85
                                    90
Phe Trp Leu Asp Cys Cys Asp Pro Asn Ile Leu Lys His Phe Ile Cys
                                105
                                                    110
Asp Ser Ser Ser Val Met Glu Leu Cys Thr Asp Thr Arg Phe Leu
                                                125
        115
                            120
Glu Leu Met Thr Phe Pro Leu Ser Leu Val Leu Met Thr Ala Ser Tyr
                       135
                                            140
Thr Ala Ile Ile Cys Ala Ile Leu Arg Leu Pro Tyr Ala Gln Gln Arg
                   150
                                       155
Arg Lys Val Phe Ser Ile Cys Ser Ser His Arg Val Gly Phe Ser Ile
                                   170
Thr Tyr Gly Ser Cys Ile Phe Met Tyr Ile Asn Thr Val Ala Asp Lys
           180
                                185
Asp Arg Val Gly Val Arg Gln Gly Leu Gly Gly Pro
                            200
<210> 2403
<211> 312
<212> PRT
<213> Unknown (OR2B8)
<400>2403
Met Asp Gln Lys Asn Gly Ser Ser Phe Thr Gly Phe Ile Leu Leu Gly
1
```

Phe Ser Asp Arg Pro Gln Leu Glu Leu Val Leu Phe Val Val Phe Leu

```
25
Ile Phe Tyr Ile Phe Thr Leu Leu Gly Asn Lys Thr Ile Ile Val Leu
                           40
Ser His Leu Asp Pro His Leu His Asn Pro Met Tyr Phe Phe Phe Ser
Asn Leu Ser Phe Leu Asp Leu Cys Tyr Thr Thr Gly Ile Val Pro Gln
                                        75
Leu Leu Val Asn Leu Arg Gly Ala Asp Lys Ser Ile Ser Tyr Gly Gly
               85
Cys Val Val Gln Leu Tyr Ile Ser Leu Gly Leu Gly Ser Thr Glu Cys
           100
                               105
Val Leu Cly Val Met Ala Phe Asp Arg Tyr Ala Ala Val Cys Arg
                           120
Pro Leu His Tyr Thr Val Val Met His Pro Cys Leu Tyr Val Leu Met
                        135
                                           140
Ala Ser Thr Ser Trp Val Ile Gly Phe Ala Asn Ser Leu Leu Gln Thr
                   150
                                       155
Val Leu Ile Leu Leu Thr Leu Cys Gly Arg Asn Lys Leu Glu His
               165
                                    170
Phe Leu Cys Glu Val Pro Pro Leu Leu Lys Leu Ala Cys Val Asp Thr
                                185
                                                    190
Thr Met Asn Glu Ser Glu Leu Phe Phe Val Ser Val Ile Ile Leu Leu
                            200
Val Pro Val Ala Leu Ile Ile Phe Ser Tyr Ser Gln Ile Val Arg Ala
                        215
Val Val Arg Ile Lys Ser Ala Thr Gly Gln Arg Lys Val Phe Gly Thr
                   230
                                        235
Cys Gly Ser His Leu Thr Val Val Ser Leu Phe Tyr Gly Thr Ala Ile
               245
                                    250
Tyr Ala Tyr Leu Gln Pro Gly Asn Asn Tyr Ser Gln Asp Gln Gly Lys
                               265
Phe Ile Ser Leu Phe Tyr Thr Ile Ile Thr Pro Met Ile Asn Pro Leu
                           280
                                                285
Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Lys Lys Val
                       295
Leu Trp Lys Asn Tyr Asp Ser Arg
                   310
<210> 2404
<211> 315
<212> PRT
<213> Unknown (OR12D3)
```

Met Glu Asn Val Thr Thr Met Asn Glu Phe Leu Leu Gly Leu Thr 5 10 . . . . . Gly Val Gln Glu Leu Gln Pro Phe Phe Gly Ile Phe Leu Ile Ile 20 Tyr Leu Ile Asn Leu Ile Gly Asn Gly Ser Ile Leu Val Met Val Val 40 Leu Glu Pro Gln Leu His Ser Pro Met Tyr Phe Phe Leu Gly Asn Leu 55 Ser Cys Leu Asp Ile Ser Tyr Ser Ser Val Thr Leu Pro Lys Leu Leu 75 Val Asn Leu Val Cys Ser Arg Arg Ala Ile Ser Phe Leu Gly Cys Ile 90 Thr Gln Leu His Phe Phe His Phe Leu Gly Ser Thr Glu Ala Ile Leu 105 Leu Ala Ile Met Ala Phe Asp Arg Phe Val Ala Ile Cys Asn Pro Leu 120 125 Arg Tyr Thr Val Ile Met Asn Pro Gln Val Cys Ile Leu Leu Ala Ala

```
140
                        135
Ala Ala Trp Leu Ile Ser Phe Phe Tyr Ala Leu Met His Ser Val Met
                    150
                                        155
Thr Ala His Leu Ser Phe Cys Gly Ser Gln Lys Leu Asn His Phe Phe
                165
                                    170
Tyr Asp Val Lys Pro Leu Leu Glu Leu Ala Cys Ser Asp Thr Leu Leu
                                185
                                                    190
            180
Asn Gln Trp Leu Leu Ser Ile Val Thr Gly Ser Ile Ser Met Gly Ala
                           200
                                                205
Phe Phe Leu Thr Leu Leu Ser Cys Phe Tyr Val Ile Gly Phe Leu Leu
                        215
                                            220
Phe Lys Asn Arg Ser Cys Arg Ile Leu His Lys Ala Leu Ser Thr Cys
                   230
                                        235
Ala Ser His Phe Met Val Val Cys Leu Phe Tyr Gly Pro Val Gly Phe
               245
                                   250
                                                        255
Thr Tyr Ile Arg Pro Ala Ser Ala Thr Ser Met Ile Gln Asp Arg Ile
            260
                                265
                                                    270
Met Ala Ile Met Tyr Ser Ala Val Thr Pro Val Leu Asn Pro Leu Ile
                            280
                                                285
Tyr Thr Leu Arg Asn Lys Glu Val Met Met Ala Leu Lys Lys Ile Phe
                       295
Gly Arg Lys Leu Phe Lys Asp Trp Gln Gln His
                    310
<210> 2405
<211> 115
<212> PRT
<213> Unknown (3273654-dir-0-5 conceptual translation of range 1-345)
Leu Phe Cys Asp Pro Ser Gln Leu Leu Asn Leu Ser Cys Ser Asn Thr
                                    10
Phe Ser Asp Asn Ile Val Lys Tyr Phe Leu Gly Ala Leu Tyr Gly Leu
            20
                                25
Phe Pro Ile Ser Gly Ile Leu Phe Ser Tyr Tyr Lys Ile Ile Ser Ser
                            40
Ile Leu Arg Ile Pro Ser Leu Gly Gly Lys Tyr Lys Ala Phe Ser Thr
Cys Gly Ser His Leu Ala Val Val Cys Leu Phe Leu Val Thr Ala Ser
                    70
                                        75
Thr Val Tyr Leu Gly Ser Val Ala Ser His Ser Pro Arg Asn Asp Val
                                   90
               85
Val Ala Ser Leu Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
Ile Cys Ser
       115
<210> 2406
<211> 139
<212> PRT
<213> Unknown (3810857-dir-0-6 conceptual translation of range 1-417)
<220>
<221> VARIANT
<222> (1)...(139)
<223> Xaa = Any Amino Acid
Met Ala Xaa Asp Arg Phe Val Ala Ile Cys His Pro Leu Asn Tyr Thr
                                   10
Val Ile Met Asn Pro Arg Ile Cys Gly Leu Leu Val Leu Leu Ser Trp
```

```
20
                                 25
 Ile Ile Met Phe Trp Val Ser Leu Ile His Met Leu Leu Met Lys Gln
                             40
 Leu Asn Phe Ser Thr Ser Thr Glu Ile Pro His Phe Phe Cys Glu Leu
                        55
 Thr Glu Leu Leu Arg Val Gly Arg Ser Asp Thr Phe Thr Gln Asn Ile
                    70
                                        75
Phe Leu Tyr Leu Gly Tyr Cys Arg Ala Gly Met Phe Pro Val Ile Gly
                85
                                     90
Ile Ala Phe Ser Tyr Phe His Ile Val Ser Ala Leu Met Lys Met Ser
            100
                                 105
                                                    110
Ser Ile Lys Asn Lys Tyr Lys Ala Phe Ser Thr Cys Gly Ser His Leu
                            120
Cys Val Val Ser Met Phe Tyr Gly Thr Gly Leu
                        135
<210> 2407
<211> 211
<212> PRT
<213> Unknown (p106-dir-0-8 conceptual translation of range 2-633)
<220>
<221> VARIANT
<222> (1)...(211)
<223> Xaa = Any Amino Acid
<400>2407
Leu Val Asp Leu Cys Leu Val Thr Thr Leu Val Pro Lys Met Leu Val
                                    10
Asn Leu Leu Thr His Ser Lys Ala Ile Ser Tyr Ala Gly Cys Leu Thr
                                 25
Gln Met Phe Phe Met Val Phe Ala Cys Ser Asn Thr Leu Leu Leu
                            40
Thr Val Met Ala Tyr Asp Arg Phe Val Ala Ile Tyr His Pro Leu Ser
                        55
                                            60
Tyr Val Thr Ile Met Arg Pro Gln Phe Cys Gly Leu Leu Ala Leu Leu
                    70
                                        75
Ser Trp Thr Ile Ser Leu Leu Asn Ala Val Leu His Ser Pro Leu Val
                85
                                    90
Met Arg Leu Leu Phe Cys Thr Glu Arg Glu Ile Pro Leu Phe Tyr His
                                105
                                                    110
Asp Leu Thr Xaa Val Leu Arg Leu Ser Cys Thr Asp Met Leu Ile Asn
                            120
Asp Ile Leu Val Tyr Leu Leu Thr Ala Leu Leu Ser Ile Phe Pro Phe
   130
                        135
Thr Gly Ile Leu Phe Ser Tyr Thr Gln Ile Cys Ser Ser Ile Val Lys
                    150
                                        155
Ile Pro Ser Thr Gly Gly Lys Tyr Lys Ala Phe Ser Thr Cys Gly Ser
                165
                                    170
                                                        175
Tyr Leu Cys Val Val Leu Leu Phe Tyr Gly Thr Val Ile Gly Val Tyr
                                185
                                                    190
Leu Ser Ser Ser Val Thr Lys Ser Ser Trp Lys Ser Ser Val Ala Ser
                            200
Val Ile Cys
   210
<210> 2408
<211> 159
<212> PRT
<213> Unknown (4877338-dir-0-6 conceptual translation of range 2-478)
```

```
<220>
<221> VARIANT
<222> (1)...(159)
<223> Xaa = Any Amino Acid
<400>2408
Ile Cys His Pro Leu Arg Tyr Thr Val Ser Met Asn Pro Arg Leu Cys
                                    10
Val Gln Leu Ile Leu Leu Ser Leu Phe Ile Ser Ile Ala Asp Ala Leu
            20
                                25
Leu His Ser Leu Met Val Leu Gln Leu Ser Phe Cys Thr Asp Leu Glu
                            40
Ile Ser Leu Phe Cys Glu Val Val Gln Val Ile Lys Arg Ala Cys Ser
                        55
Asp Thr Leu Ile Asn Asn Ile Leu Val Tyr Phe Ala Ala Gly Ile Phe
                    70
                                        75
Ala Gly Val Pro Leu Ser Gly Ile Ile Phe Ser Tyr Ile Gln Ile Val
                85
                                    90
Ser Ser Ile Leu Xaa Met Pro Ser Ser Gly Arg Lys Xaa Lys Ala Phe
                               105
            100
                                                   110
Ser Thr Cys Glu Ser His Leu Ser Val Val Ser Phe Phe Tyr Gly Thr
        115
                            120
                                                125
Ala Phe Gly Val Tyr Ile Ser Ser Ala Val Thr Asp Ser Ser Arg Lys
                        135
Thr Ala Val Ala Ser Leu Met Tyr Thr Val Val Thr Pro Val Met
                    150
<210> 2409
<211> 310
<212> PRT
<213> Unknown (p22-dir-0-11 conceptual translation of range 1-930)
<400>2409
Met Asp Gly Asp Asn Gln Ser Glu Asn Ser Gln Phe Leu Leu Gly
                                    10
Ile Ser Glu Ser Pro Glu Gln Gln Gln Ile Leu Phe Trp Met Phe Leu
Ser Met Tyr Leu Val Thr Val Leu Gly Asn Val Leu Ile Ile Leu Ala
                            40
Ile Ser Ser Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ala
                        55
                                            60
Asn Leu Ser Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys
                                        75
                    70
Met Leu Val Asn Phe Gln Ser Gln Asn Lys Ala Ile Ser Tyr Ala Gly
               85
                                   90
Cys Leu Thr Gln Leu Tyr Phe Leu Val Ser Leu Val Thr Leu Asp Asn
                               105
Leu Ile Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Cys
                            120
                                                125
Pro Leu His Tyr Val Thr Ala Met Ser Pro Gly Leu Cys Val Leu Leu
                       135
                                            140
Leu Ser Leu Cys Trp Gly Leu Ser Val Leu Tyr Gly Leu Leu Leu Thr
                   150
                                        155
Phe Leu Leu Thr Arg Val Thr Phe Cys Gly Pro Arg Glu Ile His Tyr
                                    170
                165
Leu Phe Cys Asp Met Tyr Ile Leu Leu Trp Leu Ala Cys Ser Asn Thr
            180
                                185
His Ile Ile His Thr Ala Leu Ile Ala Thr Gly Cys Phe Ile Phe Leu
                            200
                                                205
Thr Leu Leu Gly Phe Met Thr Thr Ser Tyr Val Arg Ile Val Arg Thr
                        215
                                            220
```

```
Ile Leu Gln Met Pro Ser Ala Ser Lys Lys Tyr Lys Thr Phe Ser Thr
                     230
                                         235
 Cys Ala Ser His Leu Gly Val Val Ser Leu Phe Tyr Gly Thr Leu Ala
                 245
                                     250
 Met Val Tyr Leu Gln Pro Leu His Thr Tyr Ser Met Lys Asp Ser Val
             260
                                 265
 Ala Thr Val Met Tyr Ala Val Leu Thr Pro Met Met Asn Pro Phe Ile
         275
                             280
 Tyr Ser Leu Arg Asn Lys Asp Met His Gly Ala Pro Gly Arg Val Leu
                        295
 Trp Arg Pro Phe Gln Arg
 <210> 2410
 <211> 310
 <212> PRT
 <213> Unknown (p23-dir-0-11 conceptual translation of range 1-930)
Met Asp Gly Asp Asn Gln Ser Glu Asn Ser Gln Phe Leu Leu Gly
Ile Ser Glu Ser Pro Glu Gln Gln Arg Ile Leu Phe Trp Met Phe Leu
            20
                                 25
Ser Met Tyr Leu Val Thr Val Leu Gly Asn Val Leu Ile Ile Leu Ala
                             40
                                                 45
Ile Ser Ser Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ala
                        55
                                            60
Asn Leu Ser Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys
                    70
                                        75
Met Leu Val Asn Phe Gln Ser Gln Asn Lys Ala Ile Ser Tyr Ala Gly
                85
                                    90
Cys Leu Thr Gln Leu Tyr Phe Leu Val Ser Leu Val Thr Leu Asp Asn
                                105
Leu Ile Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Thr Cys Cys
        115
                            120
                                                125
Pro Leu His Tyr Val Thr Ala Met Ser Pro Gly Leu Cys Val Leu Leu
                        135
Leu Ser Leu Cys Trp Gly Leu Ser Val Leu Tyr Gly Leu Leu Thr
                    150
                                        155
Phe Leu Leu Thr Arg Val Thr Phe Cys Gly Pro Arg Glu Ile His Tyr
                                    170
Leu Phe Cys Asp Met Tyr Ile Leu Leu Trp Leu Ala Cys Ser Asn Thr
            180
                                185
                                                    190
His Ile Ile His Thr Ala Leu Ile Ala Thr Gly Cys Phe Ile Phe Leu
                            200
                                                205
Thr Pro Leu Gly Phe Met Thr Thr Ser Tyr Val Arg Ile Val Arg Thr
                        215
                                            220
Ile Leu Gln Met Pro Ser Ala Ser Lys Lys Tyr Lys Thr Phe Ser Thr
                    230
                                        235
Cys Ala Ser His Leu Gly Val Val Ser Leu Phe Tyr Gly Thr Leu Ala
                245
                                    250
Met Val Tyr Leu Gln Pro Leu His Thr Tyr Ser Met Lys Asp Ser Val
            260
                                265
                                                    270
Ala Thr Val Met Tyr Ala Val Leu Thr Pro Met Met Asn Pro Phe Ile
       275
                            280
Tyr Arg Leu Arg Asn Lys Asp Met His Gly Ala Pro Gly Arg Val Leu
                       295
                                            300
Trp Arg Pro Phe Gln Arg
305
                    310
```

<210> 2411

```
<211> 215
<212> PRT
<213> Unknown (p139-dir-0-8 conceptual translation of range 2-646)
<400>2411
Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys Met Leu Val
                                    10
Asn Phe Gln Ser Gln Asn Lys Ala Ile Ser Tyr Ala Gly Cys Leu Thr
            20
Gln Leu Tyr Phe Leu Val Ser Leu Val Thr Leu Asp Asn Leu Ile Leu
        35
                            40
Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Cys Pro Leu His
                       55
                                            60
Cys Val Thr Ala Met Ser Pro Gly Leu Cys Val Leu Leu Leu Ser Leu
                                        75
                    70
Cys Trp Gly Leu Ser Val Leu Tyr Gly Leu Leu Thr Phe Leu Leu
               85
                                    90
Thr Arg Val Thr Phe Cys Gly Pro Arg Glu Ile His Tyr Leu Phe Cys
                               105
Asp Met Tyr Ile Leu Leu Trp Leu Ala Cys Ser Asn Thr His Ile Ile
        115
                           120
                                                125
His Thr Val Leu Ile Ala Thr Gly Cys Phe Ile Phe Leu Thr Pro Leu
                       135
                                            140
Gly Phe Met Thr Lys Ser Tyr Val Arg Ile Val Arg Thr Ile Leu Gln
                   150
                                        155
Met Pro Ser Ala Ser Lys Lys Tyr Lys Thr Phe Ser Thr Cys Ala Ser
                                    170
                165
His Leu Gly Val Val Ser Leu Phe Tyr Gly Met Leu Ala Met Val Tyr
                                185
                                                    190
Leu Gln Pro Leu His Thr Tyr Ser Met Lys Asp Ser Val Ala Thr Val
                            200
       195
Met Tyr Ala Val Val Thr Pro
    210
<210> 2412
<211> 312
<212> PRT
<213> Unknown (p182-dir-0-11 conceptual translation of range 1-936)
<220>
<221> VARIANT
<222> (1)...(312)
<223> Xaa = Any Amino Acid
<400>2412
Met Asp Gly Asp Asn Gln Ser Glu Asn Ser Gln Phe Leu Leu Gly
                                   10
Ile Ser Glu Ser Pro Glu Gln Gln Arg Ile Leu Phe Trp Met Phe Leu
Ser Met Tyr Leu Val Thr Val Leu Gly Asn Val Leu Ile Ile Leu Ala
                           40
                                               45
Ile Ser Ser Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ala
                       55
                                            60
Asn Leu Ser Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys
                   70
                                        75
Met Leu Val Asn Pro Gln Ser Gln Asn Lys Ala Ile Ser Tyr Ala Gly
                                   90
               85
Cys Leu Thr Gln Leu Xaa Phe Leu Val Ser Leu Val Thr Leu Asp Asn
                               105
Leu Ile Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Cys
                           120
```

```
Pro Leu His Tyr Val Thr Ala Met Ser Pro Gly Leu Cys Val Leu Leu
                         135
 Leu Ser Leu Cys Trp Gly Leu Ser Val Leu Tyr Gly Leu Leu Thr
                     150
                                         155
 Leu Leu Leu Thr Arg Val Thr Phe Cys Gly Pro Arg Glu Ile His Tyr
                165
                                     170
 Leu Phe Cys Asp Met Tyr Ile Leu Leu Arg Leu Ala Cys Ser Asn Thr
                                 185
                                                     190
 His Ile Ile His Thr Val Leu Val Ala Thr Gly Cys Phe Ile Phe Leu
                             200
 Thr Pro Leu Gly Phe Met Thr Thr Ser Tyr Val Cys Ile Val Arg Thr
                         215
                                             220
 Ile Leu Gln Ile Pro Ser Ala Ser Lys Lys Tyr Lys Ala Phe Ser Thr
                    230
                                         235
 Cys Ala Ser His Leu Gly Val Val Ser Leu Phe Tyr Gly Thr Leu Ala
                245
                                     250
 Met Val Tyr Leu Gln Pro Leu His Thr Tyr Ser Met Lys Asp Ser Val
            260
                                 265
                                                     270
 Ala Thr Val Met Tyr Ala Val Val Thr Pro Met Met Asn Pro Phe Ile
                            280
                                                285
 Tyr Ser Leu Arg Asn Lys Asp Met His Gly Ala Leu Gly Arg Val Leu
                        295
Arg Arg Leu Phe Gln Arg Pro Lys
                    310
<210> 2413
<211> 312
<212> PRT
<213> Unknown (p184-dir-0-11 conceptual translation of range 1-936)
<220>
<221> VARIANT
<222> (1)...(312)
<223> Xaa = Any Amino Acid
<400>2413
Met Asp Gly Asp Asn Gln Ser Glu Asn Ser Gln Phe Leu Leu Gly
                                    10
Ile Ser Glu Ser Pro Glu Gln Gln Arg Ile Leu Phe Trp Met Phe Leu
            20
                                25
Ser Met Tyr Leu Val Thr Val Leu Gly Asn Val Leu Ile Ile Leu Ala
                            40
Ile Ser Ser Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ala
Asn Leu Ser Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys
                   70
                                       75 "
Met Leu Val Asn Pro Gln Ser Gln Asn Lys Ala Ile Ser Tyr Ala Gly
                85
                                    90
Cys Leu Thr Gln Leu Xaa Phe Leu Val Ser Leu Val Thr Leu Asp Asn
            100
                                105
Leu Ile Leu Ala Val Met Ala Tyr Asp Arg Tyr Val\Ala Ile Cys Cys
                            120
                                                125
Pro Leu His Tyr Val Thr Ala Met Ser Pro Gly Leu Cys Val Leu Leu
                        135
                                            140
Leu Ser Leu Cys Trp Gly Leu Ser Val Leu Tyr Gly Leu Leu Leu Thr
                    150
                                        155
Leu Leu Thr Arg Val Thr Phe Cys Gly Pro Arg Glu Ile His His
               165
                                    170
Leu Phe Cys Asp Met Tyr Ile Leu Leu Arg Leu Ala Cys Ser Asn Thr
                                185
                                                    190
His Ile Ile His Thr Val Leu Val Ala Thr Gly Cys Phe Ile Phe Leu
```

```
200
                                               205
Thr Pro Leu Gly Phe Met Thr Thr Ser His Val Cys Ile Val Arg Thr
                                           220
                      215
Ile Leu Gln Ile Pro Ser Ala Ser Lys Lys Tyr Lys Ala Phe Ser Thr
                                       235
                  230
Cys Ala Ser His Leu Gly Val Val Ser Leu Phe Tyr Gly Thr Leu Ala
                                    250
                245
Met Val Tyr Leu Gln Pro Leu His Thr Tyr Ser Met Lys Asp Ser Val
            260
                                265
Ala Thr Val Met Tyr Ala Val Val Thr Pro Met Met Asn Pro Phe Ile
                           280
                                               285
Tyr Ser Leu Arg Asn Lys Asp Met His Gly Ala Leu Gly Arg Val Leu
                      295
Arg Arg Leu Phe Gln Arg Pro Lys
                   310
<210> 2414
<211> 312
<212> PRT
<213> Unknown (p183-dir-0-11 conceptual translation of range 1-936)
<400>2414
Met Asp Gly Asp Asn Gln Ser Glu Asn Ser Gln Phe Leu Leu Cly
                                   10
        5
Ile Ser Glu Ser Pro Glu Gln Gln Gln Ile Leu Phe Trp Met Phe Leu
                               25
Ser Met Tyr Leu Val Thr Val Leu Gly Asn Val Leu Ile Ile Leu Ala
                           40
Ile Ser Ser Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ala
                       55
Asn Leu Ser Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys
                                       75
Met Leu Val Asn Phe Gln Ser Gln Asn Lys Ala Ile Ser Tyr Ala Gly
Cys Leu Thr Gln Leu Tyr Phe Leu Val Ser Leu Val Thr Leu Asp Asn
                               105
Leu Ile Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Cys
                           120
                                               125
Pro Leu His Tyr Val Thr Ala Met Ser Pro Gly Leu Cys Val Leu Leu
                       135
                                           140
Leu Ser Leu Cys Trp Gly Leu Ser Val Leu Tyr Gly Leu Leu Thr
                   150
                                       155
Leu Leu Thr Arg Val Thr Phe Cys Gly Pro Arg Glu Ile His Tyr
                                   170
Leu Phe Cys Asp Met Tyr Ile Leu Leu Arg Leu Ala Cys Ser Asn Thr
           180
                               185
His Ile Ile His Thr Val Leu Val Ala Thr Gly Cys Phe Ile Phe Leu
                           200
                                               205
Thr Pro Leu Gly Phe Met Thr Thr Ser Tyr Val Cys Ile Val Arg Thr
                                           220
                       215
Ile Leu Gln Ile Pro Ser Ala Ser Lys Lys Tyr Lys Ala Phe Ser Thr
                   230
                                       235
Cys Ala Ser His Leu Gly Val Val Ser Leu Phe Tyr Gly Thr Leu Ala
               245
                                   250
Met Val Tyr Leu Gln Pro Leu His Thr Tyr Ser Met Lys Asp Ser Val
                                                   270
           260
                               265
Ala Thr Val Met Tyr Ala Val Val Thr Pro Met Met Asn Pro Phe Ile
                           280
Tyr Ser Leu Arg Asn Lys Asp Met His Gly Ala Leu Gly Arg Val Leu
                       295
```

Arg Arg Leu Phe Gln Arg Pro Lys

```
305
                     310
 <210> 2415
 <211> 312
 <212> PRT
 <213> Unknown (p186-dir-0-11 conceptual translation of range 1-936)
 <400>2415
 Met Asp Gly Asp Asn Gln Ser Glu Asn Ser Gln Phe Leu Leu Gly
 Ile Ser Glu Ser Pro Glu Gln Gln Ile Leu Phe Trp Met Phe Leu
             20
                                 25
 Ser Met Tyr Leu Val Thr Val Leu Gly Asn Val Leu Ile Leu Ala
                             40
 Ile Ser Ser Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ala
                                             60
 Asn Leu Ser Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys
                                         75
 Met Leu Val Asn Leu Gln Ser Gln Asn Lys Ala Ile Ser Tyr Ala Gly
                                     90
 Cys Leu Thr Gln Leu Tyr Phe Leu Val Ser Leu Val Thr Leu Asp Asn
            100
                                 105
 Leu Ile Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Cys
                            120
 Pro Leu His Tyr Val Thr Ala Met Ser Pro Gly Leu Cys Val Leu Leu
                        135
                                             140
 Leu Ser Leu Cys Trp Gly Leu Ser Val Phe Tyr Gly Leu Leu Leu Thr
                    150
                                        155
Leu Leu Leu Thr Arg Val Thr Phe Cys Gly Pro Arg Glu Ile His Tyr
                165
                                    170
Leu Phe Cys Asp Met Tyr Ile Leu Leu Arg Leu Ala Cys Ser Asn Thr
            180
                                185
His Ile Ile His Thr Val Leu Val Ala Thr Gly Cys Phe Ile Phe Leu
                            200
                                                205
Thr Pro Leu Gly Phe Met Thr Thr Ser Tyr Val Arg Ile Val Arg Thr
                        215
                                            220
Ile Leu Gln Ile Pro Ser Ala Ser Lys Lys Tyr Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ala Ser His Leu Gly Val Val Ser Leu Phe Tyr Gly Thr Leu Ala
                245
                                    250
Met Val Tyr Leu Gln Pro Leu His Thr Tyr Ser Met Lys Asp Ser Val
            260
                                265
                                                    270
Ala Thr Val Met Tyr Ala Val Val Thr Pro Met Met Asn Pro Phe Ile
                            280
                                                285
His Ser Leu Arg Asn Lys Asp Met His Gly Ala Leu Gly Arg Val Leu
                        295
Arg Arg Leu Phe Gln Arg Pro Lys
<210> 2416
<211> 215
<212> PRT
<213> Unknown (p140-dir-0-8 conceptual translation of range 2-646)
<400>2416
Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys Met Leu Val
                                    10
Asn Leu Gln Ser Gln Asn Lys Ala Ile Ser Tyr Ala Gly Cys Leu Thr
                                25
Gln Leu Tyr Phe Leu Val Ser Leu Val Thr Leu Asp Asn Leu Ile Leu
                            40
```

```
Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Cys Pro Leu His
                                           60
                       55
Tyr Val Thr Ala Met Ser Pro Gly Leu Cys Val Leu Leu Leu Ser Leu
                                       75
                   70
Cys Trp Gly Leu Ser Val Phe Tyr Gly Leu Leu Leu Thr Leu Leu
                                   90
               85
Thr Arg Val Thr Phe Cys Gly Pro Arg Glu Ile His Tyr Phe Phe Cys
                               105
           100
Asp Met Tyr Ile Leu Leu Arg Leu Ala Cys Ser Asn Thr His Ile Ile
                           120
                                               125
       115
His Thr Val Leu Val Ala Thr Gly Cys Phe Ile Phe Leu Thr Pro Leu
                                           140
                       135
Gly Phe Met Thr Thr Ser Tyr Val Arg Ile Val Arg Thr Ile Leu Gln
                                       155
                   150
Ile Pro Ser Ala Ser Lys Lys Tyr Lys Ala Phe Ser Thr Cys Ala Ser
                                   170
              165
His Leu Gly Val Val Ser Leu Phe Tyr Gly Thr Leu Ala Met Val Cys
                              185
                                                  190
Leu Gln Pro Leu His Thr Tyr Ser Met Lys Asp Ser Val Ala Thr Val
                          200
Met Tyr Ala Val Val Thr Pro
   210
<210> 2417
<211> 215
<212> PRT
<213> Unknown (p141-dir-0-8 conceptual translation of range 2-646)
Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Asn Met Leu Val
                                   10
Asn Leu Gln Ser Gln Asn Lys Ala Ile Ser Tyr Ala Gly Cys Leu Thr
           20
                               25
Lys Leu Tyr Phe Leu Val Ser Leu Val Thr Leu Asp Asn Leu Ile Leu
                           40
      35
Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Cys Pro Leu His
                                           60
Tyr Val Thr Ala Met Ser Pro Gly Leu Cys Val Leu Leu Leu Ser Leu
                                       75
                   70
Gly Trp Gly Leu Ser Val Leu Tyr Gly Leu Leu Leu Thr Leu Leu Met
                                   90
               85
Thr Arg Val Thr Phe Cys Gly Pro Arg Glu Ile His Tyr Leu Phe Cys
                                                  110
                              105
Glu Met Tyr Val Leu Leu Arg Leu Ala Cys Ser Asn Thr His Ile Ile
      115
                           120
                                               125
His Thr Val Leu Val Ala Thr Gly Cys Phe Ile Phe Leu Thr Pro Leu
                                           140
                       135
Gly Phe Met Thr Thr Ser Tyr Val Arg Ile Val Arg Thr Ile Leu Gln
                   150
                                       155
Met Pro Ser Ala Ser Lys Lys Tyr Lys Thr Phe Ser Thr Cys Ala Ser
                                   170
His Leu Gly Val Val Ser Leu Phe Tyr Gly Thr Leu Ala Met Val Tyr
                               185
           180
Leu Gln Pro Leu His Thr Tyr Ser Met Lys Asp Ser Val Ala Thr Val
                           200
Met Tyr Ala Val Val Thr Pro
    210
<210> 2418
<211> 312
<212> PRT
```

<213> Unknown (p187-dir-0-11 conceptual translation of range 1-936) Met Asp Gly Asp Asn Gln Ser Glu Asn Ser Gln Phe Leu Leu Gly Ile Ser Glu Ser Pro Glu Gln Gln Ile Leu Phe Trp Met Phe Leu 20 25 Ser Met Tyr Leu Val Thr Val Leu Gly Asn Val Leu Ile Ile Leu Ala 40 35 Ile Ser Ser Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ala 55 60 Asn Leu Ser Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys 75 Met Leu Val Asn Phe Gln Ser Gln Asn Lys Ala Ile Ser Tyr Ala Glu 90 Cys Leu Thr Gln Leu Tyr Phe Leu Val Ser Leu Val Thr Leu Asp Asn 105 110 Leu Ile Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Cys 125 120 Pro Leu His Tyr Val Thr Ala Met Ser Pro Gly Leu Cys Val Leu Leu 135 140 Leu Ser Leu Cys Trp Gly Leu Ser Val Leu Tyr Gly Leu Leu Thr 150 155 Leu Leu Met Asn Arg Val Thr Phe Cys Gly Pro Arg Glu Ile His Tyr 170 165 Leu Phe Cys Glu Met Tyr Val Leu Leu Arg Leu Ala Cys Ser Asn Thr 185 180 His Ile Ile His Thr Val Leu Val Ala Thr Gly Cys Phe Ile Phe Leu 200 205 Thr Pro Leu Gly Phe Met Thr Thr Ser Tyr Val His Ile Val Arg Thr 220 215 Ile Leu Gln Ile Pro Ser Ala Ser Lys Lys Tyr Lys Thr Phe Ser Thr 235 230 Cys Ala Ser His Leu Gly Val Val Ser Leu Phe Tyr Gly Thr Leu Ala 250 245 Met Val Tyr Leu Gln Pro Leu His Thr Tyr Ser Met Lys Asp Ser Val 265 270 Ala Thr Val Met Tyr Ala Val Val Thr Pro Met Met Asn Pro Phe Ile 280 285 Tyr Ser Leu Arg Asn Lys Asp Met His Gly Val Leu Gly Arg Val Leu 295 Gly Arg Pro Phe Gln Arg Pro Lys 310 <210> 2419 <211> 211 <212> PRT <213> Unknown (p167-dir-0-8 conceptual translation of range 2-634) <400>2419 Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys Met Leu Val 10 Asn Leu Gln Ser Gln Asn Lys Ala Ile Ser Tyr Ala Gly Cys Leu Thr 25 Gln Leu Tyr Phe Leu Val Ser Leu Val Ala Leu Asp Asn Leu Ile Leu 40 Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu His Tyr 55 60 Val Thr Ala Met Ser Pro Gly Leu Cys Val Leu Leu Leu Cys Leu Cys 70 Trp Ser Val Leu Tyr Gly Leu Leu Leu Thr Leu Leu Met Thr Thr Val

```
90
                85
Thr Phe Cys Gly Ser Arg Lys Ile His Tyr Leu Phe Cys Glu Met Tyr
                               105
Val Leu Leu Arg Leu Ala Cys Ser Asn Thr His Ile Ile His Thr Val
                            120
                                                125
 Leu Val Ala Thr Gly Cys Phe Phe Leu Thr Pro Leu Gly Phe Thr Thr
                        135
                                            140
Thr Ser Tyr Val Arg Ile Val Arg Thr Ile Leu Gln Ile Pro Ser Val
                    150
                                        155
Pro Lys Lys Tyr Lys Thr Phe Ser Thr Cys Ala Ser His Leu Gly Val
                165
                                    170
                                                        175
Val Ser Leu Phe Tyr Gly Thr Leu Val Met Val Tyr Leu Gln Pro Leu
           180
                               185
                                                   190
His Thr Tyr Ser Met Lys Asp Ser Val Ala Thr Val Met Tyr Ala Val
       195
                           200
Val Thr Pro
    210
<210> 2420
<211> 210
<212> PRT
<213> Unknown (p168-dir-0-8 conceptual translation of range 2-632)
<400>2420
Phe Thr Asp Leu Phe Phe Val Thr Asn Ile Pro Lys Met Leu Val Asn
Leu Gln Ser Gln Asn Lys Ala Ile Ser Tyr Ala Gly Cys Leu Thr Gln
            20
Leu Tyr Phe Leu Val Ser Leu Val Ala Leu Asp Asn Leu Ile Leu Ala
                            40
                                                45
Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu His Tyr Val
                        55
Thr Ala Met Ser Pro Gly Leu Cys Val Leu Leu Leu Cys Leu Cys Trp
                    70
Ser Val Leu Tyr Gly Leu Leu Thr Leu Leu Met Thr Thr Val Thr
               85
                                    90
Phe Cys Gly Ser Arg Lys Ile His Tyr Leu Phe Cys Glu Met Tyr Val
           100
                                105
Leu Leu Arg Leu Ala Cys Ser Asn Thr His Ile Ile His Thr Val Leu
                            120
                                               125
Val Ala Thr Gly Cys Phe Phe Leu Thr Pro Leu Gly Phe Thr Thr
                        135
Ser Tyr Ile Arg Ile Val Arg Thr Ile Leu Gln Ile Pro Ser Val Pro
                    150
                                        155
Lys Lys Tyr Lys Thr Phe Ser Thr Cys Ala Ser His Leu Gly Val Val
               165
                                   170
Ser Leu Phe Tyr Gly Thr Leu Val Met Val Tyr Leu Gln Pro Leu His
                               185
                                                   190
Thr Tyr Ser Met Lys Asp Ser Val Ala Thr Val Met Tyr Ala Val Val
                            200
Thr Pro
   210
<210> 2421
<211> 313
<212> PRT
<213> Unknown (p145-dir-0-11 conceptual translation of range 1-937)
<400>2421
Met Asp Gly Gly Asn Gln Ser Glu Gly Ser Glu Phe Leu Leu Gly
```

```
Ile Ser Glu Ser Pro Glu Gln Gln Met Leu Phe Trp Met Phe Leu
                                25
Val Arg Tyr Leu Val Thr Val Leu Gly Asn Val Leu Ile Ile Leu Ala
                            40
Ile Ser Ser Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ala
                        55
Asn Leu Ser Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys
                                        75
Met Leu Val Asn Leu Gln Ser Gln Asn Lys Ala Ile Ser Tyr Thr Gly
                                    90
Cys Leu Thr Gln Leu Tyr Phe Leu Val Ser Leu Val Ala Leu Asp Asn
                                105
Leu Asn Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Arg
                            120
                                                125
Pro Leu His Tyr Val Thr Ala Met Ile Pro Gly Leu Cys Ile Leu Leu
                        135
Leu Ser Leu Cys Trp Val Phe Ser Ala Leu Tyr Gly Leu Ile His Ile
                   150
                                        155
Leu Leu Met Thr Arg Val Thr Phe Cys Gly Ser Gln Lys Ile His Tyr
                165
                                   170
Leu Phe Cys Glu Met Tyr Phe Leu Leu Arg Leu Ala Cys Ser Asn Ile
            180
                                185
His Val Asn His Thr Val Leu Val Ala Thr Gly Cys Phe Ile Phe Leu
                            200
                                                205
Ile Pro Leu Gly Phe Met Ile Thr Ser Tyr Ala Arg Ile Val Arg Ala
                        215
                                            220
Ile Leu Gln Ile Pro Ser Ala Thr Gly Lys Tyr Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ala Ser His Leu Ala Val Val Ser Leu Phe Tyr Gly Thr Leu Gly
                245
                                    250
Met Val Tyr Leu Gln Pro Leu Gln Thr Tyr Ser Met Lys Asp Ser Val
            260
                                265
                                                    270
Ala Thr Val Met Tyr Ala Val Val Thr Pro Met Ile Asn Pro Phe Ile
                            280
                                                285
Tyr Ser Leu Arg Asn Lys Asp Met His Gly Ala Leu Gly Arg Leu Arg
                        295
Gln Gly Lys Ala Phe Gln Lys Leu Thr
<210> 2422
<211> 214
<212> PRT
<213> Unknown (3831606-dir-0-8 conceptual translation of range 2-642)
<400>2422
Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys Met Leu Val
                                    10
Asn Leu Gln Ser Gln Asn Lys Ala Ile Ser Tyr Thr Gly Cys Leu Thr
                                25
Gln Leu Tyr Phe Leu Val Ser Leu Val Ala Leu Asp Asn Leu Asn Leu
                            40
Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Arg Pro Leu His
                        55
Tyr Val Thr Ala Met Ile Pro Gly Leu Cys Ile Leu Leu Leu Ser Leu
Cys Trp Val Phe Ser Ala Leu Tyr Gly Leu Ile His Ile Leu Leu Met
                85
                                    90
Thr Arg Val Thr Phe Cys Gly Ser Gln Lys Ile His Tyr Leu Phe Cys
            100
                                105
                                                   110
Glu Met Tyr Phe Leu Leu Arg Leu Ala Cys Ser Asn Ile His Val Asn
                            120
```

```
His Thr Val Leu Val Ala Thr Gly Cys Phe Ile Phe Leu Ile Pro Leu
                        135
 Gly Phe Met Ile Thr Ser Asn Ala Arg Ile Val Arg Ala Ile Leu Gln
                    150
                                        155
 Ile Pro Ser Ala Thr Gly Lys Tyr Lys Ala Phe Ser Thr Cys Ala Ser
                165
                                    170
His Leu Ala Val Val Ser Leu Phe Tyr Gly Thr Leu Gly Met Val Tyr
            180
                               185
Leu Gln Pro Leu Gln Thr Tyr Ser Met Lys Asp Ser Val Ala Thr Val
                            200
Met His Ala Val Val Thr
    210
<210> 2423
<211> 319
<212> PRT
<213> Unknown (p35-dir-0-11 conceptual translation of range 1-954)
<400>2423
Met Asp Gly Gly Asn Gln Ser Glu Gly Ser Glu Phe Leu Leu Gly
 1
                                    10
Met Ser Glu Ser Pro Glu Gln Gln Gln Ile Leu Phe Trp Met Phe Leu
            20
Val Met Tyr Leu Val Thr Val Val Gly Asn Val Leu Ile Ile Leu Ala
        35
                            40
Ile Ser Ser Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ala
                        55
                                            60
Ser Leu Ser Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys
                    70
                                        75
Met Leu Val Asn Leu Gln Ser Gln Asn Lys Ala Ile Ser Tyr Ala Gly
                85
                                    90
Cys Leu Met Gln Leu Tyr Phe Leu Val Ser Leu Val Ala Leu Asp Asn
            100
                                105
Leu Ile Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Arg
        115
                            120
                                                125
Pro Leu His Tyr Val Thr Ala Met Ser Pro Gly Leu Cys Ile Leu Leu
                                            140
                        135
Leu Ser Leu Cys Trp Gly Phe Ser Ala Leu Tyr Gly Leu Ile His Ile
                   150
                                        155
Leu Leu Met Thr Arg Val Thr Phe Cys Gly Ser Gln Lys Ile His Tyr
               165
                                   170
                                                        175
Leu Phe Cys Glu Met Tyr Phe Leu Leu Arg Leu Ala Cys Ser Asn Ile
           180
                               185
His Val Asn His Thr Val Leu Val Ala Thr Gly Cys Phe Ile Phe Leu
                            200
                                                205
Ile Pro Leu Gly Phe Met Ile Thr Ser Tyr Ala His Ile Val Arg Ala
                       215
                                            220
Ile Leu Gln Ile Pro Ser Ala Thr Gly Lys Tyr Lys Ala Phe Ser Thr
                    230
                                        235
Ser Ala Ser His Leu Ala Val Val Phe Leu Phe Tyr Gly Thr Leu Gly
                245
                                    250
Met Val Tyr Leu Gln Pro Leu His Asn Leu Gln Pro Leu Gln Thr Tyr
                                                    270
                                265
Ser Met Lys Asp Ser Val Ala Thr Val Met Tyr Ala Val Val Thr Pro
        275
                            280
Met Ile Asn Pro Phe Ile Tyr Ser Leu Arg Asn Lys Asp Met His Gly
                        295
                                            300
Ala Leu Gly Arg Leu Arg Gln Gly Lys Ala Phe Gln Lys Leu Thr
                   310
                                        315 ·
```

<210> 2424

```
<211> 313
<212> PRT
<213> Unknown (p34-dir-0-11 conceptual translation of range 1-937)
Met Asp Gly Gly Asn Gln Ser Glu Gly Ser Glu Phe Leu Leu Gly
                                    10
Met Ser Glu Ser Pro Glu Gln Gln Gln Ile Leu Phe Trp Met Phe Leu
           20
                                25
Val Met Tyr Leu Val Thr Val Val Gly Asn Val Leu Ile Ile Leu Ala
                            40
        35
Ile Ser Ser Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ala
                        55
                                            60
Asn Leu Ser Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys
                                        75
Met Leu Val Asn Leu Gln Ser Gln Asn Lys Ala Ile Ser Tyr Ala Gly
                                    90
Cys Leu Met Gln Leu Tyr Phe Leu Val Ser Leu Val Ala Leu Asp Asn
                               105
Leu Ile Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Arg
                            120
                                                125
Pro Leu His Tyr Val Thr Ala Met Ser Pro Gly Leu Cys Ile Leu Leu
                        135
                                            140
Leu Ser Leu Cys Trp Gly Phe Ser Ala Leu Tyr Gly Leu Ile His Ile
                    150
                                        155
Leu Leu Met Thr Arg Val Thr Phe Cys Gly Ser Gln Lys Ile His Tyr
                                    170
                165
Leu Phe Cys Glu Met Tyr Phe Leu Leu Arg Leu Ala Cys Ser Asn Ile
                                185
                                                    190
His Val Asn His Thr Val Leu Val Ala Thr Gly Cys Phe Ile Phe Leu
                            200
                                                205
Ile Pro Leu Gly Phe Met Ile Thr Ser Tyr Ala His Ile Val Arg Ala
                        215
                                            220
Ile Leu Gln Ile Pro Ser Ala Thr Gly Lys Tyr Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ala Ser His Leu Ala Val Val Phe Leu Phe Tyr Gly Thr Val Gly
                                    250
                245
Met Val Tyr Leu Gln Pro Leu Gln Thr Tyr Ser Met Lys Asp Ser Val
                                265
Ala Thr Val Met Tyr Ala Val Val Thr Pro Met Ile Asn Pro Phe Ile
                           280
                                                285
Tyr Ser Leu Arg Asn Lys Asp Met His Gly Ala Leu Gly Arg Leu Arg
                       295
Gln Gly Lys Ala Phe Gln Lys Leu Thr
                   310
<210> 2425
<211> 313
<212> PRT
<213> Unknown (p87-dir-0-11 conceptual translation of range 1-937)
<400>2425
Met Asp Gly Asp Asn Gln Ser Glu Gly Ser Glu Phe Leu Leu Arg Gly
Ile Ser Glu Ser Pro Glu Gln Gln Ile Leu Phe Trp Met Phe Leu
            20
Ser Met Tyr Leu Val Thr Val Leu Gly Asn Val Phe Ile Ile Leu Ala
                            40
Ile Ser Ser Asp Ser Arg Leu His Thr Pro Val Tyr Phe Phe Leu Ala
                       55
                                            60
Asn Phe Ser Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys
```

```
70
                                         75
 Met Pro Val Asn Leu Gln Ser Gln Asn Lys Ala Ile Ser Tyr Ala Gly
                                    90
 Cys Leu Thr Gln Leu Tyr Phe Leu Val Ser Leu Val Ala Leu Asp Asn
                                105
 Leu Ile Pro Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Arg
                            120
 Pro Leu His Tyr Val Thr Ala Met Ser Pro Gly Leu Cys Ile Leu Leu
                       135
                                            140
 Leu Ser Met Cys Trp Val Phe Ser Ala Leu Tyr Gly Leu Ile His Ile
                    150
                                       155
 Leu Leu Met Thr Arg Val Thr Phe Cys Gly Ser Gln Lys Ile His Tyr
                                    170
                165
 Leu Phe Cys Glu Met Tyr Phe Leu Leu Arg Leu Ala Cys Ser Asn Ile
                                185
                                                    190
 His Val Asn His Thr Val Leu Val Ala Met Gly Cys Phe Ile Phe Leu
                            200
 Ile Pro Leu Gly Phe Met Ile Thr Ser Tyr Ala Arg Ile Val Arg Ala
                        215
                                            220
Ile Leu Gln Ile Pro Pro Ala Thr Gly Lys Tyr Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ala Ser His Leu Ala Val Val Ser Leu Phe Tyr Gly Thr Leu Gly
                245
                                    250
Ile Val Tyr Leu Gln Pro Pro Gln Thr Tyr Ser Met Lys Asp Ser Val
                                265
Ala Thr Val Met Tyr Val Val Val Thr Pro Met Ile Asn Pro Phe Ile
        275
                           280
                                                285
Tyr Ser Leu Arg Asn Lys Asp Met His Gly Asp Leu Gly Arg Leu Arg
                       295
Gln Gly Lys Ala Phe Gln Lys Leu Thr
                    310
<210> 2426
<211> 313
<212> PRT
<213> Unknown (p136-dir-0-11 conceptual translation of range 1-939)
Met Asp Gly Gly Asn Gln Ser Lys Gly Ser Glu Phe Leu Leu Gly
                                    10
Met Ser Glu Ser Pro Glu Gln Gln Arg Ile Leu Phe Trp Met Phe Leu
           20
                                25
Ser Met Tyr Leu Val Thr Val Val Gly Asn Ala Leu Ile Ile Leu Ala
                            40
                                               45
Ile Thr Ser Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Val
                                            60
Asn Leu Ser Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys
                    70
Met Leu Val Asn Leu Gln Ser Gln Asn Lys Ala Ile Ala Tyr Ala Gly
               85
                                    90
Cys Leu Thr Gln Leu Tyr Phe Leu Val Ser Leu Val Ala Leu Asp Asn
           100
                                105
Leu Ile Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
                            120
                                                125
Pro Leu His Tyr Val Thr Ala Met Ser Pro Gly Leu Cys Ile Leu Leu
                       135
                                           140
Leu Ser Leu Cys Trp Val Phe Ser Val Leu Tyr Gly Leu Ile His Thr
                  150
                                       155
Leu Leu Met Thr Arg Val Thr Phe Cys Gly Ser Arg Lys Ile His Tyr
               165
                                   170
Leu Phe Cys Glu Met Tyr Val Leu Leu Gln Leu Ala Cys Ser Asn Ile
```

```
190
                                185
            180
His Val Asn His Thr Val Leu Val Ala Thr Gly Cys Phe Ile Phe Leu
                            200
Ile Pro Leu Gly Phe Met Ile Thr Ser Tyr Ala Arg Ile Val Arg Ala
                        215
                                            220
Ile Leu Arg Ile Pro Ser Ala Thr Gly Lys Tyr Lys Ala Phe Ser Thr
                   230
                                        235
Cys Ala Ser His Leu Ala Val Val Ser Leu Phe Tyr Gly Thr Leu Gly
                                    250
               245
Met Val Tyr Leu Gln Pro Leu Gln Thr Tyr Ser Met Lys Asp Ser Val
                                265
            260
Ala Thr Val Met Tyr Ala Val Val Thr Pro Met Met Asn Pro Phe Ile
                            280
Tyr Ser Leu Lys Asn Lys Asp Met His Gly Ala Leu Gly Arg Leu Leu
                       295
Gln Gly Lys Ala Phe Trp Lys Leu Thr
<210> 2427
<211> 313
<212> PRT
<213> Unknown (p163-dir-0-11 conceptual translation of range 1-939)
<400>2427
Met Asp Gly Gly Asn Gln Ser Glu Gly Ser Glu Phe Leu Leu Gly
                                    10
Met Ser Glu Ser Pro Glu Gln Gln Arg Ile Leu Phe Trp Met Phe Leu
Ser Met Tyr Leu Val Thr Val Leu Gly Asn Val Leu Ile Ile Leu Ala
        35
                            40
Ile Ser Ser Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ala
                        55
Asn Leu Ser Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys
                    70
                                        75
Met Leu Val Asn Leu Gln Ser Gln Asp Lys Ala Ile Ser Tyr Ala Gly
                                    90
Cys Leu Thr Gln Leu Tyr Phe Leu Leu Ser Leu Val Thr Leu Asp Asn
                                105
Leu Ile Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Cys
                            120
                                                125
Pro Leu His Tyr Val Thr Ala Met Ser Pro Arg Leu Cys Ile Leu Leu
                        135
                                            140
Leu Ser Leu Cys Trp Val Phe Ser Val Leu Tyr Gly Leu Ile His Thr
                   150
                                        155
Leu Leu Met Thr Arg Val Thr Phe Cys Gly Ser Arg Lys Ile His Tyr
               165
                                    170
                    -
Leu Phe Cys Glu Met Tyr Phe Leu Leu Arg Leu Ala Cys Ser Asn Ile
           180
                                185
Gln Ile Asn His Thr Val Leu Ile Ala Thr Gly Cys Phe Ile Phe Leu
                            200
Ile Pro Leu Gly Phe Met Ile Thr Ser Tyr Ala Arg Ile Val Arg Ala
                        215
Ile Leu Arg Ile Pro Ser Ala Thr Gly Lys Tyr Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ala Ser His Leu Ala Val Val Ser Leu Phe Tyr Gly Thr Leu Gly
                                    250
Met Val Tyr Leu Gln Pro Leu Gln Thr Tyr Ser Thr Lys Asp Ser Val
                                                    270
           260
                                265
Ala Thr Val Met Tyr Ala Val Val Thr Pro Met Met Asn Pro Phe Ile
                           280
                                                285
Tyr Ser Leu Arg Asn Lys Asp Ile His Gly Ala Leu Gly Arg Leu Leu
```

```
290
                        295
                                             300
 Gln Gly Lys Ala Phe Gln Lys Leu Thr
                    310
 <210> 2428
 <211> 312
 <212> PRT
 <213> Unknown (p18-dir-0-11 conceptual translation of range 1-936)
 <400>2428
 Met Asp Gly Gly Asn Gln Ser Glu Gly Ser Glu Phe Leu Leu Gly
Met Ser Glu Ser Pro Glu Gln Gln Gln Ile Leu Phe Trp Met Phe Leu
                                 25
 Ser Met Tyr Leu Val Thr Val Val Gly Asn Val Leu Ile Ile Leu Ala
        35
                            40
Ile Ser Ser Asp Ser Arg Leu His Thr Pro Val Tyr Phe Phe Leu Ala
                        55
                                            60
Asn Leu Ser Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys
                    70
                                        75
Met Leu Val Asn Leu Gln Ser His Asn Lys Ala Ile Ser Tyr Ala Gly
Cys Leu Thr Gln Leu Tyr Phe Leu Val Ser Leu Val Ala Leu Asp Asn
            100
                                105
Leu Ile Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Cys
                            120
                                                125
Pro Leu His Tyr Thr Thr Ala Met Ser Pro Lys Leu Cys Ile Leu Leu
                        135
                                            140
Leu Ser Leu Cys Trp Val Leu Ser Val Leu Tyr Gly Leu Ile His Thr
                   150
                                        155
Leu Leu Met Thr Arg Val Thr Phe Cys Gly Ser Arg Lys Ile His Tyr
                165
                                   170
Ile Phe Cys Glu Met Tyr Val Leu Leu Arg Met Ala Cys Ser Asn Ile
            180
                                185
Gln Ile Asn His Thr Val Leu Ile Ala Thr Gly Cys Phe Ile Phe Leu
                            200
                                                205
Ile Pro Phe Gly Phe Val Ile Ile Ser Tyr Val Leu Ile Ile Arg Ala
                        215
                                            220
Ile Leu Arg Ile Pro Ser Val Ser Lys Lys Tyr Lys Ala Phe Ser Thr
                   230
                                        235
Cys Ala Ser His Leu Gly Ala Val Ser Leu Phe Tyr Gly Thr Leu Cys
                245
                                    250
Met Val Tyr Leu Lys Pro Leu His Thr Tyr Ser Val Lys Asp Ser Val
                                265
Ala Thr Val Met Tyr Ala Val Val Thr Pro Met Met Asn Pro Phe Ile
                           280
                                               285
Tyr Ser Leu Arg Asn Lys Asp Met His Gly Ala Leu Gly Arg Leu Leu
                       295
Asp Lys His Phe Lys Arg Leu Thr
305
<210> 2429
<211> 312
<212> PRT
<213> Unknown (p32-dir-0-11 conceptual translation of range 1-936)
<400>2429
Met Asp Gly Gly Asn Gln Ser Glu Gly Ser Glu Phe Leu Leu Gly
                                    10
Met Ser Glu Ser Pro Glu Gln Gln Gln Ile Leu Phe Trp Met Phe Leu
            20
```

```
Ser Met Tyr Leu Val Thr Val Val Gly Asn Val Leu Ile Ile Leu Ala
                            40
Ile Asn Ser Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ala
Asn Leu Ser Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys
                                        75
Met Leu Val Asn Leu Gln Ser Gln Asn Lys Ala Ile Ser Tyr Ala Gly
                                    90
Cys Leu Thr Gln Leu Tyr Phe Leu Val Ser Leu Val Ala Leu Asp Asn
                                105
            100
Leu Ile Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Cys
                            120
Pro Leu His Tyr Thr Thr Ala Met Ser Pro Lys Leu Cys Ile Leu Leu
                        135
                                            140
Leu Ser Leu Cys Trp Val Leu Ser Val Leu Tyr Gly Leu Ile His Thr
                   150
                                        155
Ile Leu Met Thr Arg Val Thr Phe Cys Gly Ser Arg Lys Ile His Tyr
                                    170
Ile Phe Cys Glu Met Tyr Val Leu Leu Arg Met Ala Cys Ser Asn Ile
           180
                                185
Gln Ile Asn His Thr Val Leu Ile Ala Thr Gly Cys Phe Ile Phe Leu
                            200
                                                205
Ile Pro Phe Gly Phe Val Ile Ile Ser Tyr Val Leu Ile Ile Arg Ala
                        215
                                            220
Ile Leu Arg Ile Pro Ser Val Ser Lys Lys Tyr Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ala Ser His Leu Gly Ala Val Ser Leu Phe Tyr Gly Thr Leu Cys
                                    250
Met Val Tyr Leu Lys Pro Leu His Thr Phe Ser Val Lys Asp Ser Val
            260
                                265
Ala Thr Val Met Tyr Ala Val Val Thr Pro Met Met Asn Pro Phe Ile
                            280
Tyr Ser Leu Arg Asn Lys Asp Met His Gly Ala Leu Gly Arg Leu Leu
                        295
Asp Thr His Phe Lys Arg Leu Thr
<210> 2430
<211> 312
<213> Unknown (p130-dir-0-11 conceptual translation of range 1-936)
<400>2430
Met Asp Gly Gly Asn Gln Ser Glu Gly Ser Glu Phe Leu Leu Gly
                                    10
Met Ser Glu Ser Pro Glu Gln Gln Arg Ile Leu Phe Trp Met Phe Leu
                                25
Ser Met Tyr Leu Val Thr Val Val Gly Asn Val Leu Ile Ile Leu Ala
                            40
Ile Ser Ser Asp Ser Cys Leu His Thr Pro Met Tyr Phe Phe Leu Ala
                                            60
Asn Leu Ser Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys
                    70
                                        75
Met Leu Val Asn Leu Gln Ser Gln Asn Lys Ala Ile Ser Tyr Ala Gly
Cys Leu Thr Gln Leu Tyr Phe Leu Val Ser Leu Val Ala Leu Asp Asn
            100
                                105
Leu Ile Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Cys
                            120
                                                125
Pro Leu His Tyr Thr Thr Ala Met Ser Pro Lys Leu Cys Ile Leu Leu
                                            140
                        135
```

```
Leu Ser Leu Cys Trp Val Leu Ser Val Leu Tyr Gly Leu Ile His Thr
                 150
                                      155
Leu Leu Met Thr Arg Val Thr Phe Cys Gly Ser Arg Lys Ile His Tyr
                                   170
               165
Ile Phe Cys Glu Met Tyr Val Leu Leu Arg Met Ala Cys Ser Asn Ile
                               185
           180
Gln Thr Asn His Thr Val Leu Ile Ala Thr Gly Cys Phe Ile Phe Leu
                           200
                                               205
Ile Pro Phe Gly Phe Val Ile Ile Ser Tyr Val Leu Ile Ile Arg Ala
                       215
                                           220
Ile Leu Arg Ile Pro Ser Leu Ser Lys Lys Tyr Lys Ala Phe Ser Thr
                                      235
                  230
Cys Ala Ser His Leu Gly Ala Val Ser Leu Phe Tyr Gly Thr Leu Cys
                                   250
               245
Met Val Tyr Leu Lys Pro Leu His Thr Tyr Ser Val Lys Asp Ser Val
                               265
           260
Ala Thr Val Met Tyr Ala Val Val Thr Pro Met Met Asn Pro Phe Ile
                                              285
                          280
Tyr Ser Leu Arg Asn Lys Asp Met His Gly Ala Leu Gly Arg Leu Leu
          295
Asp Lys His Phe Lys Arg Leu Thr
                   310
<210> 2431
<211> 215
<212> PRT
<213> Unknown (p143-dir-0-8 conceptual translation of range 2-646)
Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys Met Leu Val
                                   10
Ser Leu Gln Ser Gln Asn Lys Ala Ile Ser Tyr Pro Gly Cys Leu Thr
                               25
           20
Gln Leu Phe Phe Leu Val Ser Leu Val Ala Leu Asp Asn Leu Ile Leu
                           40
Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu His
                                          60
                       55
Tyr Thr Thr Ala Met Ser Pro Lys Leu Cys Ile Leu Leu Leu Leu
                                       75
                   70
Cys Trp Ala Leu Ser Ile Leu Tyr Gly Leu Ile His Thr Leu Leu Met
                                   90
Thr Arg Val Thr Phe Cys Gly Ser Arg Lys Ile His Tyr Ile Phe Cys
                              105
           100
Glu Met Tyr Val Leu Leu Arg Leu Ala Cys Ser Asn Thr His Ile Asn
                                               125
                           120
    115
His Met Met Leu Ile Ala Thr Gly Cys Phe Val Phe Leu Val Pro Phe
                       135
                                           140
Gly Phe Met Ile Met Ser Tyr Ile Cys Ile Val Arg Ala Ile Leu Lys
                   150
                                       155
Ile Pro Ser Ala Ser Asn Lys Tyr Lys Ala Phe Ser Thr Cys Ala Ser
                                   170
               165
His Leu Ala Val Val Ala Leu Phe Tyr Gly Thr Leu Cys Met Val Tyr
                               185
Leu Lys Pro Leu His Thr Tyr Ser Met Lys Asp Ser Val Ala Thr Val
                                               205
                           200
Met Tyr Ala Val Val Thr Pro
<210> 2432
<211> 312
<212> PRT
```

```
<213> Unknown (p89-dir-0-11 conceptual translation of range 1-935)
<220>
<221> VARIANT
<222> (1)...(312)
<223> Xaa = Any Amino Acid
<400>2432
Met Arg Glu Asn Asn Gln Ser Ser Thr Leu Glu Phe Ile Leu Leu Gly
                                   10
Val Thr Gly Gln Gln Glu Gln Glu Asp Phe Phe Tyr Ile Leu Phe Leu
                                25
Phe Ile Tyr Pro Ile Thr Leu Ile Gly Asn Leu Leu Ile Val Leu Ala
                            40
                                                45
Ile Cys Ser Asp Val His Leu His Asn Pro Met Tyr Phe Leu Leu Ala
                        55
Asn Leu Ser Leu Val Asp Ile Phe Phe Ser Ser Val Thr Ile Pro Lys
                    70
                                        75
Met Leu Ala Asn His Leu Ser Gly Ser Lys Ser Ile Ser Phe Gly Gly
                                    90
                85
Cys Leu Thr Gln Met Tyr Phe Met Ile Asp Leu Gly Asn Thr Asp Ser
                                105
            100
Tyr Thr Leu Ala Ala Met Ala Tyr Asp Arg Ala Val Ala Ile Ser Arg
                            120
Pro Leu His Tyr Thr Thr Ile Met Ser Pro Arg Ser Cys Ile Trp Leu
                        135
                                            140
Ile Ala Gly Ser Trp Val Ile Gly Asn Ala Asn Ala Leu Pro His Thr
                    150
                                        155
Leu Leu Thr Ala Ser Leu Ser Phe Xaa Gly Asn Gln Glu Val Ala Asn
                                    170
                165
Phe Tyr Cys Asp Ile Thr Pro Leu Leu Lys Leu Ser Cys Ser Asp Ile
                                185
Arg Phe His Val Lys Met Met Tyr Leu Gly Val Gly Ile Phe Pro Val
                            200
Pro Leu Leu Cys Ile Ile Val Ser Tyr Ile Arg Val Phe Ser Thr Val
                        215
                                            220
Phe Gln Val Pro Ser Thr Lys Gly Val Leu Lys Ala Phe Ser Thr Cys
                    230
                                        235
Gly Ser His Leu Thr Val Val Cys Phe Val Tyr Gly Thr Val Met Gly
                                    250
                245
Met Tyr Phe Arg Pro Leu Thr Asn Tyr Ser Leu Lys Asp Ala Val Ile
                                265
            260
Thr Val Met Cys Thr Ala Val Thr Pro Met Leu Asn Pro Phe Ile Tyr
                            280
Ser Leu Arg Asn Arg Asp Met Lys Ala Ala Leu Gln Lys Leu Phe Asn
                       295
                                            300
Lys Arg Ile Ser Ser Xaa Pro Met
305
                    310
<210> 2433
<211> 312
<213> Unknown (p88-dir-0-11 conceptual translation of range 1-936)
<220>
<221> VARIANT
<222> (1)...(312)
<223> Xaa = Any Amino Acid
Met Arg Glu Asn Asn Gln Ser Ser Thr Leu Glu Phe Ile Leu Leu Gly
```

```
10
Val Thr Gly Gln Gln Glu Gln Glu Asp Phe Phe Tyr Ile Leu Phe Leu
                               25
           20
Phe Ile Tyr Pro Ile Thr Leu Ile Gly Asn Leu Leu Ile Val Leu Ala
                                               45
       35
                           40
Ile Cys Ser Asp Val His Leu His Asn Pro Met Tyr Phe Leu Leu Ala
                       55
                                           60
Asn Leu Ser Leu Val Asp Ile Phe Phe Ser Ser Val Thr Ile Pro Lys
                                       75
                   70
Met Leu Ala Asn His Leu Ser Gly Ser Lys Ser Ile Ser Phe Gly Gly
                                   90
               85
Cys Leu Thr Gln Met Tyr Phe Met Ile Asp Leu Gly Asn Thr Asp Ser
                               105
                                                    110
           100
Tyr Thr Leu Ala Ala Met Ala Tyr Asp Arg Ala Val Ala Ile Ser Arg
                           120
                                               125
Pro Leu His Tyr Thr Thr Ile Met Ser Pro Arg Ser Cys Ile Trp Leu
                                           140
                       135
Ile Ala Gly Ser Trp Val Ile Gly Asn Ala Asn Ala Leu Pro His Thr
                   150
                                       155
Leu Leu Thr Ala Ser Leu Ser Phe Cys Gly Asn Gln Glu Val Ala Asn
                                   170
               165
Phe Tyr Cys Asp Ile Thr Pro Leu Leu Lys Leu Ser Cys Ser Asp Ile
                                                   190
                               185
           180
His Phe His Val Lys Met Met Tyr Leu Gly Val Gly Ile Phe Ser Val
                                                205
      195
                           200
Pro Leu Leu Cys Ile Ile Val Ser Tyr Ile Arg Val Phe Ser Thr Val
                                           220
                       215
Phe Gln Val Pro Ser Thr Lys Gly Val Leu Lys Ala Phe Ser Thr Cys
                   230
                                       235
Gly Ser His Leu Thr Val Val Ser Leu Tyr Tyr Gly Thr Val Met Gly
                                   250
               245
Met Tyr Phe Arg Pro Leu Thr Asn Tyr Ser Leu Lys Asp Ala Val Ile
                               265
                                                   270
Thr Val Met Cys Thr Ala Val Thr Pro Met Leu Asn Pro Phe Ile Tyr
                           280
                                               285
       275
Ser Leu Arg Asn Arg Asp Met Lys Ala Ala Leu Gln Lys Leu Phe Asn
                       295
Lys Arg Ile Ser Ser Xaa Pro Met
                   310
<210> 2434
<211> 312
<212> PRT
<213> Unknown (p33-dir-0-11 conceptual translation of range 1-936)
<220>
<221> VARIANT
<222> (1)...(312)
<223> Xaa = Any Amino Acid
<400>2434
Met Arg Glu Asn Asn Gln Ser Ser Thr Leu Glu Phe Ile Leu Leu Gly
               5
                                   10
Val Thr Gly Gln Gln Glu Gln Asp Phe Phe Tyr Ile Leu Phe Leu
                               25
Phe Ile Tyr Pro Ile Thr Leu Ile Gly Asn Leu Leu Ile Ile Leu Ala
                           40
Ile Cys Ser Asp Val His Leu His Asn Pro Met Tyr Phe Leu Leu Ala
                       55
                                           60
Asn Leu Ser Leu Val Asp Ile Phe Phe Ser Ser Val Thr Ile Pro Lys
                                       75
                   70
```

```
Met Leu Ala Asn His Leu Ser Gly Ser Lys Ser Ile Ser Phe Gly Gly
                                 90
               85
Cys Leu Thr Gln Met Tyr Phe Met Ile Asp Leu Gly Asn Thr Asp Ser
                               105
           100
Tyr Ile Leu Ala Ala Met Ala Tyr Asp Arg Ala Val Ala Ile Ser Arg
                           120
Pro Leu His Tyr Thr Thr Ile Met Ser Pro Arg Ser Cys Ile Trp Leu
                                          140
                       135
Ile Ala Gly Ser Trp Val Ile Gly Asn Ala Asn Ala Leu Pro His Thr
                                       155
                   150
Leu Leu Thr Ala Ser Leu Ser Phe Xaa Gly Asn Gln Glu Val Ala Asn
               165
                                   170
Phe Tyr Cys Asp Ile Thr Pro Leu Leu Lys Leu Ser Cys Ser Asp Ile
                                                    190
                               185
His Phe His Val Lys Met Met Tyr Leu Gly Val Gly Ile Phe Ser Val
                                                205
                            200
Pro Leu Leu Cys Ile Ile Val Ser Tyr Ile Arg Val Phe Ser Thr Val
                                            220
                       215
Phe Gln Gly Pro Ser Thr Lys Gly Val Leu Lys Ala Phe Ser Thr Cys
                                        235
                    230
Gly Ser His Leu Thr Val Val Ser Leu Asp Tyr Gly Thr Val Lys Gly
                                    250
               245
Lys Tyr Phe Arg Pro Leu Thr Asn Tyr Ser Leu Lys Asp Ala Val Ile
                                                    270
                                265
           260
Thr Val Met Cys Thr Ala Val Thr Pro Met Leu Asn Pro Phe Ile Tyr
                            280
                                                285
Ser Leu Arg Asn Arg Asp Met Lys Ala Ala Leu Gln Lys Leu Phe Asn
                        295
Lys Arg Ile Ser Ser Xaa Pro Met
                    310
<210> 2435
<211> 312
<212> PRT
<213> Unknown (p43-dir-0-11 conceptual translation of range 1-936)
<220>
<221> VARIANT
<222> (1)...(312)
<223> Xaa = Any Amino Acid
<400>2435
Met Arg Glu Asn Asn Gln Ser Ser Thr Leu Glu Phe Ile Leu Leu Gly
                                    10
Val Thr Gly Gln Gln Glu Gln Glu Asp Phe Phe Tyr Ile Leu Phe Leu
                                25
            20
Phe Ile Tyr Pro Ile Thr Leu Ile Gly Asn Leu Leu Ile Val Leu Ala
                            40
Ile Cys Ser Asp Val Arg Leu His Asn Pro Met Tyr Phe Leu Leu Ala
                                            60
Asn Leu Ser Leu Val Asp Ile Phe Phe Ser Ser Val Thr Ile Pro Lys
                                        75
Met Leu Ala Asn His Leu Leu Gly Ser Lys Ser Ile Ser Phe Gly Gly
                                    90
Cys Leu Thr Gln Met Tyr Phe Met Ile Ala Leu Gly Asn Thr Asp Ser
                                105
            100
Tyr Ile Leu Ala Ala Met Ala Tyr Asp Arg Ala Val Ala Ile Ser His
                            120
Pro Leu His Tyr Thr Thr Ile Met Ser Pro Arg Ser Cys Ile Trp Leu
                                            140
                       135
Ile Ala Gly Ser Trp Val Ile Gly Asn Ala Asn Ala Leu Pro His Thr
```

```
150
                                       155
Leu Leu Thr Ala Ser Leu Ser Phe Cys Gly Asn Gln Glu Val Ala Asn
                165
                                   170
Phe Tyr Cys Asp Ile Thr Pro Leu Leu Lys Leu Ser Cys Ser Asp Ile
                               185
            180
His Phe His Val Lys Met Met Tyr Leu Gly Val Gly Ile Phe Ser Val
                           200
                                                205
Pro Leu Cys Ile Ile Val Ser Tyr Ile Arg Val Phe Ser Thr Val
                        215
                                            220
Phe Gln Val Pro Ser Thr Lys Gly Val Leu Lys Ala Phe Ser Thr Cys
                    230
                                        235
Gly Ser His Leu Thr Val Val Ser Leu Tyr Tyr Gly Thr Val Met Gly
                                    250
                245
Thr Tyr Phe Arg Pro Leu Thr Asn Tyr Ser Leu Lys Asp Ala Val Ile
            260
                                265
                                                    270
Thr Val Met Tyr Thr Ala Val Thr Pro Met Leu Asn Pro Phe Ile Tyr
                           280
                                               285
Ser Leu Arg Asn Arg Asp Met Lys Ala Ala Leu Arg Lys Leu Phe Asn
                       295
Lys Arg Ile Ser Ser Xaa Pro Met
                   310
<210> 2436
<211> 309
<212> PRT
<213> Unknown (p180-dir-0-11 conceptual translation of range 1-927)
<400>2436
Met Arg Glu Asn Asn Gln Ser Ser Thr Leu Glu Phe Ile Leu Leu Gly
Val Thr Gly Gln Gln Glu Gln Asp Phe Phe Tyr Ile Leu Phe Leu
            20
                                25
Phe Ile Tyr Pro Ile Thr Leu Ile Gly Asn Leu Leu Ile Val Leu Ala
        35 ..
                            40
                                                45
Ile Cys Ser Asp Val His Leu His Asn Pro Met Tyr Phe Leu Leu Ala
                       55
Asn Leu Ser Leu Val Asp Ile Phe Phe Ser Ser Val Thr Ile Pro Lys
                   70
                                        75
Met Leu Ala Asn His Leu Leu Gly Ser Lys Ser Ile Ser Phe Gly Gly
               85
                                   90
Cys Leu Thr Gln Met Tyr Phe Met Ile Ala Leu Gly Asn Thr Asp Ser
           100
                               105
Tyr Ile Leu Ala Ala Met Ala Tyr Asp Arg Ala Val Ala Ile Ser Arg
                           120
                                                125
Pro Leu His Tyr Thr Thr Ile Met Ser Pro Arg Ser Cys Ile Trp Leu
                        135
                                            140
Ile Ala Gly Ser Trp Val Ile Gly Asn Ala Asn Ala Leu Pro His Thr
                   150
                                       155
Leu Leu Thr Ala Ser Leu Ser Phe Cys Gly Asn Gln Glu Val Ala Asn
               165
                                   170
Phe Tyr Cys Asp Ile Thr Pro Leu Leu Lys Leu Ser Cys Ser Asp Ile
                               185
His Phe His Val Lys Met Met Tyr Leu Gly Val Gly Ile Phe Ser Val
                           200
                                                205
Pro Leu Leu Cys Ile Ile Val Ser Tyr Ile Arg Val Phe Ser Thr Val
                       215
                                           220
Phe Gln Val Pro Ser Thr Lys Gly Val Leu Lys Ala Phe Ser Thr Cys
                   230
                                       235
Gly Ser His Leu Thr Val Val Ser Leu Tyr Tyr Gly Thr Val Met Gly
               245
                                   250
Met Tyr Phe Arg Pro Leu Thr Asn Tyr Ser Leu Lys Asp Ala Val Ile
```

```
260
                                265
                                                     270
Thr Val Met Tyr Thr Ala Val Thr Pro Met Leu Asn Pro Phe Ile Tyr
                            280
                                                285
Ser Leu Arg Asn Arg Asp Val Lys Ala Ala Leu Arg Lys Leu Phe Asn
                        295
Lys Arg Ile Ser Ser
305
<210> 2437
<211> 309
<213> Unknown (p204-dir-0-11 conceptual translation of range 1-927)
<400>2437
Met Lys Lys Glu Asn Gln Ser Phe Asn Leu Asp Phe Ile Leu Leu Gly
                                    10
Val Thr Ser Gln Gln Glu Gln Asn Asn Val Phe Phe Val Ile Phe Leu
            20
                                25
Cys Ile Tyr Pro Ile Thr Leu Thr Gly Asn Leu Leu Ile Ile Leu Ala
                            40
Ile Cys Ala Asp Ile Arg Leu His Asn Pro Met Tyr Phe Leu Leu Ala
                        55
Asn Leu Ser Leu Val Asp Ile Ile Phe Ser Ser Val Thr Ile Pro Lys
                                        75
Val Leu Ala Asn His Leu Leu Gly Ser Lys Phe Ile Ser Phe Gly Gly
                                    90
Cys Leu Met Gln Met Tyr Phe Met Ile Ala Leu Ala Lys Ala Asp Ser
            100
                                105
Tyr Thr Leu Ala Ala Met Ala Tyr Asp Arg Ala Val Ala Ile Ser Cys
                            120
                                                125
Pro Leu His Tyr Thr Thr Ile Met Ser Pro Arg Ser Cys Ile Leu Leu
                        135
                                            140
Ile Ala Gly Ser Trp Val Ile Gly Asn Thr Ser Ala Leu Pro His Thr
                    150
                                        155
Leu Leu Thr Ala Ser Leu Ser Phe Cys Gly Asn Gln Glu Val Ala Asn
                                    170
Phe Tyr Cys Asp Ile Met Pro Leu Leu Lys Leu Ser Cys Ser Asp Val
            180
                                185
His Phe Asn Val Lys Met Met Tyr Leu Gly Val Gly Val Phe Ser Leu
                            200
                                                205
Pro Leu Cys Ile Ile Val Ser Tyr Val Gln Val Phe Ser Thr Val
                        215
                                            220
Phe Gln Val Pro Ser Thr Lys Ser Leu Phe Lys Ala Phe Cys Thr Cys
                    230
                                        235
Gly Ser His Leu Thr Val Val Phe Leu Tyr Tyr Gly Thr Thr Met Gly
                245
                                    250
Met Tyr Phe Arg Pro Leu Thr Ser Tyr Ser Pro Lys Asp Ala Val Ile
           260
                                265
Thr Val Met Tyr Val Ala Val Thr Pro Ala Leu Asn Pro Phe Ile Tyr
                            280
                                                285
Ser Leu Arg Asn Trp Asp Met Lys Ala Ala Leu Gln Lys Leu Phe Ser
                        295
Lys Arg Ile Ser Ser
305
<210> 2438
<211> 214
<213> Unknown (p179-dir-0-8 conceptual translation of range 2-643)
<400>2438
```

```
Leu Val Asp Ile Phe Phe Ser Ser Val Thr Ile Pro Lys Met Leu Ala
                                    10
                5
Asn His Leu Leu Gly Ser Lys Ala Ile Ser Phe Gly Gly Cys Met Ala
Gln Met Tyr Phe Met Ile Ser Leu Gly Asn Thr Asp Ser Tyr Ile Leu
Ala Ala Met Ala Tyr Asp Arg Ala Val Ala Ile Ser Arg Pro Leu His
Tyr Ala Thr Ile Met Ser Pro Gln Leu Cys Val Leu Leu Val Ala Gly
                                       75
                    70
Ser Trp Val Ile Ala Asn Ala Asn Ala Leu Pro His Thr Leu Leu Thr
                                    90
                85
Ala Arg Leu Ser Phe Cys Gly Asn Lys Asp Val Ala Asn Phe Tyr Cys
                               105
           100
Asp Ile Thr Pro Leu Leu Gln Leu Ser Cys Ser Asp Ile Arg Phe Asn
                            120
                                                125
       115
Val Lys Met Met Tyr Leu Gly Val Gly Val Phe Ser Val Pro Leu Leu
                       135
                                            140
Cys Ile Ile Ile Ser Tyr Val Arg Val Phe Ser Thr Val Leu Arg Val
                                       155
                   150
Pro Ser Thr Lys Gly Phe Leu Lys Ala Leu Ser Thr Cys Gly Ser His
                                    170
                165
Leu Thr Val Val Ser Leu Tyr Tyr Gly Thr Val Met Gly Met Tyr Phe
           180
                                185
Arg Pro Leu Thr Ser Tyr Ser Leu Lys His Ala Leu Ile Thr Val Met
                            200
Tyr Thr Ala Val Thr Pro
    210
<210> 2439
<211> 214
<212> PRT
<213> Unknown (p191-dir-0-8 conceptual translation of range 2-643)
Leu Val Asp Ile Phe Phe Ser Ser Val Thr Ile Pro Lys Met Leu Ala
                                    10
Asn His Leu Leu Gly Ser Lys Ala Ile Ser Phe Gly Gly Cys Met Ala
           20
Gln Met Tyr Phe Met Ile Gly Leu Ala Asn Thr Asp Ser Tyr Ile Leu
                            40
Ala Ala Met Ala Tyr Asp Arg Ala Val Ala Ile Ser Arg Pro Leu His
                       55
Tyr Ala Thr Ile Met Ser Pro Gln Leu Cys Val Leu Leu Val Ala Gly
                                       75
                   70
Ser Trp Val Ile Ala Asn Ala Asn Ala Leu Pro His Thr Leu Leu Thr
                                   90
Ala Arg Leu Ser Phe Cys Gly Asn Lys Asp Val Ala Asn Phe Tyr Cys
                               105
                                                    110
Asp Ile Thr Pro Leu Leu Gln Leu Ser Cys Ser Asp Ile Arg Phe Asn
                           120
                                                125
Val Lys Met Met Tyr Leu Gly Val Gly Val Phe Ser Val Pro Leu Leu
                                            140
                       135
Cys Ile Ile Ile Ser Tyr Val Arg Val Phe Ser Thr Val Leu Arg Val
                                        155
                   150
Pro Ser Thr Lys Gly Phe Leu Lys Ala Leu Ser Thr Cys Gly Ser His
                                    170
Leu Thr Val Val Ser Leu Tyr Tyr Gly Thr Val Met Gly Met Tyr Phe
                                185
Arg Pro Leu Thr Ser Tyr Ser Leu Lys His Ala Leu Ile Thr Val Met
                            200
```

```
Tyr Thr Ala Val Thr Pro
     210
 <210> 2440
 <211> 222
 <212> PRT
 <213> Unknown (3983387-dir-0-8 conceptual translation of range 1-666)
 Ala Asn Leu Ser Phe Val Asp Val Cys Phe Thr Thr Asn Leu Ile Pro
                                     10
 Arg Leu Leu Ala Gly His Val Ala Gly Thr Arg Thr Ile Ser Tyr Val
                                 25
His Cys Leu Thr Gln Thr Tyr Phe Leu Ile Ser Phe Ala Asn Val Asp
                             40
                                                 45
 Thr Phe Leu Leu Ala Ala Met Ala Leu Asp Arg Phe Val Ala Ile Cys
                                             60
Tyr Pro Leu Gln Tyr His Thr Ile Ile Thr Pro Gln Leu Cys Val Gly
                     70
Leu Ala Ala Val Val Trp Met Cys Ser Ala Leu Ile Ser Leu Met His
                 85
                                     90
Thr Leu Leu Met Ser Arg Leu Ser Phe Cys Ser Ser Ile Pro Glu Ile
            100
                                 105
Ser His Phe Tyr Cys Asp Ala Tyr Leu Leu Met Lys Leu Ala Cys Ser
                             120
Asp Thr Arg Val Asn Gln Leu Val Phe Leu Gly Ala Val Val Leu Phe
                        135
                                             140
Val Ala Pro Cys Ile Leu Ile Val Val Ser Tyr Val Arg Ile Thr Met
                    150
                                         155
Val Val Leu Gln Ile Pro Ser Ala Lys Gly Arg His Lys Thr Phe Ser
                165
                                    170
Thr Cys Ser Ser His Leu Ser Val Val Thr Leu Phe Tyr Gly Thr Val
            180
                                185
Leu Gly Ile Tyr Ile Arg Pro Pro Asp Ser Phe Ser Thr Gln Asp Thr
                            200
Val Ala Thr Ile Met Tyr Thr Val Val Thr Pro Met Leu Asn
                        215
<210> 2441
<211> 314
<212> PRT
<213> Unknown (205837-dir-0-11 conceptual translation of range 1-942)
<400>2441
Met Thr Arg Arg Asn Gln Thr Ala Ile Ser Gln Phe Phe Leu Leu Gly
             -, -. .5 -- . . .
                                    10
Leu Pro Phe Pro Pro Glu Tyr Gln His Leu Phe Tyr Ala Leu Phe Leu
                                25
Ala Met Tyr Leu Thr Thr Leu Leu Gly Asn Leu Ile Ile Ile Leu
                            40
Ile Leu Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser
                                            60
Asn Leu Ser Phe Ala Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys
                    70
                                        75
Leu Leu Gln Asn Met Gln Ser Gln Val Pro Ser Ile Pro Tyr Ala Gly
                85
                                    90
Cys Leu Ala Gln Ile Tyr Phe Phe Leu Phe Phe Gly Asp Leu Gly Asn
                                105
Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
                            120
Pro Leu His Tyr Met Ser Ile Met Ser Pro Lys Leu Cys Val Ser Leu
```

```
140
                      135
Val Val Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His Thr
          150
                                     155
Leu Leu Met Ala Arg Leu Ser Phe Cys Glu Asp Ser Val Ile Pro His
                                  170
              165
Tyr Phe Cys Asp Met Ser Thr Leu Leu Lys Val Ala Cys Ser Asp Thr
           180
                              185
His Asp Asn Glu Leu Ala Ile Phe Ile Leu Gly Gly Pro Ile Val Val
                          200
       195
Leu Pro Phe Leu Leu Ile Ile Val Ser Tyr Ala Arg Ile Val Ser Ser
                                         220
                      215
Ile Phe Lys Val Pro Ser Ser Gln Ser Ile His Lys Ala Phe Ser Thr
                                    235
                  230
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Val Ile
                                  250
              245
Gly Leu Tyr Leu Cys Pro Ser Ala Asn Asn Ser Thr Val Lys Glu Thr
                                                 270
          260
                              265
Val Met Ser Leu Met Tyr Thr Met Val Thr Pro Met Leu Asn Pro Phe
                                            285
       275
                         280
Ile Tyr Ser Leu Arg Asn Arg Asp Ile Lys Asp Ala Leu Glu Lys Ile
                    295
Met Cys Lys Lys Gln Ile Pro Ser Phe Leu
                  310
<210> 2442
<211> 221
<212> PRT
<213> Unknown (3769630-dir-0-8 conceptual translation of range 1-663)
<400>2442
Leu Asn Leu Ser Phe Ala Asp Leu Cys Phe Ser Ser Val Thr Met Pro
1
Lys Leu Leu Gln Asn Met Gln Ser Gln Val Pro Ser Ile Pro Tyr Ala
                              25
Gly Cys Leu Ala Gln Ile Tyr Phe Phe Leu Phe Phe Gly Asp Leu Gly
                          40
Asn Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys
                      55
                                          60
Phe Pro Leu His Tyr Met Ser Ile Met Ser Pro Lys Leu Cys Val Ser
                                     75
                  70
Leu Val Val Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His
              85
                                  90
Thr Leu Leu Met Ala Arg Leu Ser Phe Arg Glu Asp Ser Val Ile Pro
                             105
His Tyr Phe Cys Asp Met Ser Thr Leu Leu Lys Val Ala Cys Pro Asp
                                              125
                          120
Thr His Asp Asn Glu Leu Ala Ile Phe Ile Leu Gly Gly Pro Ile Val
                                         140
                      135
Val Leu Pro Phe Leu Leu Ile Ile Val Ser Tyr Ala Arg Ile Val Ser
                                      155
                  150
Ser Ile Phe Lys Val Pro Ser Ser Gln Ser Ile His Lys Ala Phe Ser
                                  170
              165
Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Ile Tyr Gly Thr Val
                             185
                                                 190
Ile Gly Leu Tyr Leu Cys Pro Ser Ala Asn Asn Ser Thr Val Lys Glu
       195 200
Thr Val Met Ser Leu Met Tyr Thr Met Val Thr Pro Met
  210
                      215
<210> 2443
```

1483

<211> 314

```
<212> PRT
<213> Unknown (1504111-dir-0-11 conceptual translation of range 1-942)
<400>2443
Met Thr Glu Arg Asn Gln Thr Val Ile Ser Gln Phe Leu Leu Gly
Leu Pro Ile Pro Pro Glu His Gln His Val Phe Tyr Ala Leu Phe Leu
            20
                                25
                                                    30
Ser Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Ile Ile Ile Leu
        35
                            40
Ile Leu Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser
                        55
                                            60
Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys
                    70
                                        75
Leu Leu Gln Asn Met Gln Ser Gln Val Pro Ser Ile Pro Tyr Ala Gly
                85
                                    90
Cys Leu Ser Gln Ile Tyr Phe Phe Leu Phe Phe Gly Asp Leu Gly Asn
            100
                               105
                                                    110
Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
                            120
                                                125
Pro Leu His Tyr Met Ser Ile Met Ser Pro Lys Leu Cys Val Ser Leu
    130
                        135
                                            140
Val Val Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His Thr
                    150
                                        155
Leu Leu Met Ala Arg Leu Ser Phe Cys Glu Asp Asn Val Ile Pro His
               165
                                   170
Phe Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp Thr
           180
                               185
                                                   190
Arg Val Asn Glu Val Val Ile Phe Ile Val Val Ser Leu Phe Leu Val
                            200
                                                205
Leu Pro Phe Ala Leu Ile Ile Met Ser Tyr Val Arg Ile Val Ser Ser
Ile Leu Lys Val Pro Ser Ser Gln Gly Ile Tyr Lys Ala Phe Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Val Ile
                245
                                    250
Gly Leu Tyr Leu Cys Pro Ser Ser Asn Asn Ser Thr Val Lys Glu Thr
            260
                                265
Val Met Ser Leu Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                           280
        275
                                               285
Ile Tyr Ser Leu Arg Asn Arg Asp Ile Lys Gly Ala Met Glu Arg Ile
                       295
Phe Cys Lys Arg Lys Ile Gln Leu Asn Leu
305
                    310
<210> 2444
<211> 221
<213> Unknown (3769633-dir-0-8 conceptual translation of range 1-663)
<400>2444
Ser Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro
1
                                    10
Lys Leu Gln Asn Met Gln Ser Gln Val Pro Ser Ile Pro Tyr Ala
                                25
Gly Cys Leu Ser Gln Ile Tyr Phe Phe Leu Phe Phe Gly Asp Leu Gly
                            40
Asn Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys
                       55
                                            60
Phe Pro Leu His Tyr Met Ser Ile Met Ser Pro Lys Leu Cys Val Ser
```

```
Leu Val Val Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His
                85
                                 90
 Thr Leu Leu Met Ala Arg Leu Ser Phe Cys Glu Asp Asn Val Ile Pro
                                 105
 His Phe Phe Cys Asp Thr Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp
                            120
 Thr Arg Val Asn Glu Val Val Ile Phe Ile Val Val Ser Leu Phe Leu
                        135
 Val Leu Pro Phe Ala Leu Ile Ile Met Ser Tyr Val Arg Ile Val Ser
                    150
                                        155
 Ser Ile Leu Lys Val Pro Ser Ser Gln Gly Ile Tyr Glu Ala Phe Ser
                165
                                    170
 Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Val
            180
                                185
                                                    190
 Ile Gly Leu Tyr Leu Cys Pro Ser Ser Asn Asn Ser Thr Val Lys Glu
                            200
 Thr Val Met Ser Leu Met Tyr Thr Val Val Thr Pro Met
                        215
<210> 2445
<211> 221
<212> PRT
<213> Unknown (3769632-dir-0-8 conceptual translation of range 1-663)
<400>2445
Gly Asn Met Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro
                 5
Lys Leu Gln Asn Met Gln Ser Gln Val Pro Ser Ile Pro Tyr Val
            20
                                25
Gly Cys Leu Ser Gln Ile Tyr Phe Phe Leu Phe Phe Gly Asp Leu Gly
                            40
                                                45
Asn Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Thr Cys
                        55
Phe Pro Leu His Tyr Met Ser Ile Met Ser Pro Lys Leu Cys Val Ser
                    70
Leu Val Val Leu Ser Trp Val Arg Thr Thr Phe His Ala Met Leu His
                                    90
Thr Leu Leu Met Ala Arg Leu Ser Phe Cys Glu Asp Asn Val Ile Pro
                                105
His Phe Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp
                            120
                                                125
Thr Arg Val Asn Glu Val Val Ile Phe Ile Val Val Ser Leu Phe Leu
    130
                        135
                                           140
Val Leu Pro Phe Ala Leu Ile Ile Met Ser Tyr Val Arg Ile Val Ser
                    150
                                        155
Ser Ile Leu Lys Val Pro Ser Ser Gln Gly Ile Tyr Lys Ala Phe Ser
                165
                                    170
                                                        175
Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Val
           180
                                185
                                                    190
Ile Gly Leu Tyr Leu Cys Pro Ser Ser Asn Asn Ser Thr Val Lys Glu
                            200
                                                205
Thr Val Met Ser Leu Met Tyr Thr Ala Val Thr Pro Met
                        215
<210> 2446
<211> 157
<213> Unknown (902347-dir-0-6 conceptual translation of range 2-472)
<400>2446
Ile Cys Phe Pro Leu His Tyr Met Ser Ile Met Ser Pro Ser Leu Cys
```

```
10
Val Ser Leu Val Leu Leu Ser Trp Val Leu Thr Thr Phe His Ala Met
                               25
Leu His Thr Leu Leu Met Ala Arg Leu Ser Phe Cys Glu Asp Asn Val
                                                45
                           40
Ile Pro His Phe Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ser Cys
                                            60
                       55
Ser Asp Thr His Val Asn Glu Leu Val Ile Phe Val Thr Gly Gly Leu
                                       75
                   70
Ile His Val Ile Pro Leu Val Leu Ile Leu Val Ser Tyr Ala Gln Ile
                                    90
               85
Val Ser Ser Ile Leu Lys Val Pro Ser Ala Arg Gly Ile Arg Lys Ala
                                105
            100
Phe Ser Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly
                            120
        115
Thr Ile Ile Gly Leu Tyr Leu Cys Pro Ser Ala Asp Asn Ser Thr Val
                       135
                                            140
Lys Glu Thr Val Met Ala Met Met Tyr Thr Val Val Thr
                   150
<210> 2447
<211> 157
<212> PRT
<213> Unknown (902682-dir-0-6 conceptual translation of range 2-472)
<400>2447
Ile Cys Phe Pro Leu His Tyr Met Ser Ile Met Ser Pro Ser Leu Cys
                                    10
1
Val Ser Leu Val Leu Leu Ser Trp Val Leu Thr Thr Phe His Ala Met
            20
                                25
Leu His Thr Leu Leu Met Ala Arg Leu Ser Phe Cys Glu Asp Asn Val
                            40
                                                45
Ile Pro His Phe Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ser Cys
                        55
                                           60
Ser Asp Thr His Val Asn Glu Leu Val Ile Phe Val Thr Gly Gly Leu
                   70
                                       75
Ile Leu Val Ile Pro Phe Val Leu Ile Leu Val Ser Tyr Ala Gln Ile
                                    90
                85
Val Ser Ser Ile Leu Lys Val Pro Ser Ala Arg Gly Ile Arg Lys Ala
            100
                                105
Phe Ser Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly
                                                125
                            120
       115
Thr Ile Ile Gly Leu Tyr Leu Cys Pro Ser Ala Asp Asn Ser Thr Val
                       135
                                            140
Lys Glu Thr Val Met Ala Met Met Tyr Thr Val Val Thr
                  _150
                                       155
<210> 2448
<211> 221
<212> PRT
<213> Unknown (3769627-dir-0-8 conceptual translation of range 1-663)
<400>2448
Gly Asn Ile Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro
Lys Leu Leu Gln Asn Met Gln Ser Gln Val Pro Ser Ile Pro Tyr Ala
Gly Cys Leu Thr Gln Leu Tyr Phe Tyr Leu Tyr Phe Ala Asp Leu Glu
                           40
                                               45
Ser Phe Leu Leu Glu Ala Met Ala Tyr Asp Arg Tyr Val Ala Thr Cys
```

```
Phe Pro Leu His Tyr Met Ser Ile Met Ser Pro Lys Leu Cys Val Ser
                    70
Leu Val Val Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His
                                    90
Thr Leu Leu Met Ala Arg Leu Ser Phe Cys Ala Asp Asn Met Ile Pro
                                105
            100
His Phe Phe Cys Asp Ile Ser Pro Leu Leu Lys Leu Ser Cys Ser Asp
        115
                            120
Thr His Val Asn Glu Leu Val Ile Phe Val Met Gly Gly Leu Val Ile
                                            140
                       135
Val Ile Pro Phe Val Leu Ile Ile Val Ser Tyr Ala Arg Val Val Ala
                   150
                                        155
Ser Ile Leu Lys Val Pro Ser Val Arg Gly Ile His Lys Ile Phe Ser
                                   170
                165
Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile
                               185
                                                    190
           180
Ile Gly Leu Tyr Leu Cys Pro Ser Ala Asn Asn Ser Thr Val Lys Glu
                         200
                                                205
Thr Val Met Ala Met Met Tyr Thr Val Val Thr Pro Met
<210> 2449
<211> 221
<212> PRT
<213> Unknown (3769629-dir-0-8 conceptual translation of range 1-663)
<220>
<221> VARIANT
<222> (1)...(221)
<223> Xaa = Any Amino Acid
<400>2449
Ser Asn Ile Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro
                                    10
Lys Leu Leu Gln Asn Met Gln Ser Gln Val Pro Ser Ile Pro Tyr Ala
            20
                                25
Gly Cys Leu Thr Gln Leu Tyr Phe Tyr Leu Tyr Phe Ala Asp Leu Glu
                            40
Ser Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Val Cys
                        55
                                            60
Phe Pro Leu His Tyr Met Ser Ile Met Ser Pro Lys Leu Cys Val Ser
                   70
                                        75
Leu Val Val Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His
                                    90
Thr Leu Leu Met Ala Arg Leu Ser Phe Cys Ala Asp Asn Met Ile Pro
                               105
His Phe Phe Cys Asp Ile Ser Pro Leu Leu Lys Leu Ser Cys Ser Asp
                            120
                                                125
Arg His Val Asn Glu Leu Val Ile Phe Val Met Gly Gly Leu Val Ile
                        135
                                            140
Val Ile Pro Phe Val Leu Ile Ile Val Ser Xaa Ala Arg Val Val Ala
                    150
                                        155
Ser Ile Leu Lys Val Pro Ser Val Arg Gly Ile His Lys Ile Phe Ser
               165
                                    170
Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile
            180
                                185
                                                    190
Ile Gly Leu Tyr Leu Cys Pro Ser Ala Asn Asn Ser Thr Val Lys Glu
                            200
Thr Val Met Ala Met Met Tyr Thr Val Val Thr Pro Met
                        215
                                            220
```

```
<210> 2450
 <211> 314
 <212> PRT
 <213> Unknown (205845-dir-0-11 conceptual translation of range 1-942)
 <400>2450
 Met Thr Glu Glu Asn Gln Thr Val Ile Ser Gln Phe Leu Leu Phe
                                     10
 Leu Pro Ile Pro Ser Glu His Gln His Val Phe Tyr Ala Leu Phe Leu
                                25
 Ser Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Ile Ile Ile Leu
        35
 Ile His Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser
                        55
 Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys
                    70
 Leu Leu Gln Asn Met Gln Ser Gln Val Pro Ser Ile Pro Phe Ala Gly
                85
                                    90
Cys Leu Thr Gln Leu Tyr Phe Tyr Leu Tyr Phe Ala Asp Leu Glu Ser
                               105
Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
                            120
                                                125
Pro Leu His Tyr Met Ser Ile Met Ser Pro Lys Leu Cys Val Ser Leu
                        135
                                            140
Val Val Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His Thr
                    150
                                        155
Leu Leu Met Ala Arg Leu Ser Phe Cys Ala Asp Asn Met Ile Pro His
                165
                                    170
Phe Phe Cys Asp Ile Ser Pro Leu Leu Lys Leu Ser Cys Ser Asp Thr
            180
                                185
His Val Asn Glu Leu Val Ile Phe Val Met Gly Gly Leu Val Ile Val
                            200
                                                205
Ile Pro Phe Val Leu Ile Ile Val Ser Tyr Ala Arg Val Val Ala Ser
                        215
                                            220
Ile Leu Lys Val Pro Ser Val Arg Gly Ile His Lys Ile Phe Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile
                245
                                    250
Gly Leu Tyr Leu Cys Pro Ser Ala Asn Asn Ser Thr Val Lys Glu Thr
            260
                                265
Val Met Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
       275
                            280
                                                285
Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Glu Ala Leu Ile Arg Val
                        295
Leu Cys Lys Lys Ile Thr Phe Cys Leu
305 - - -
<210> 2451
<211> 192
<212> PRT
<213> Unknown (2921663-dir-1-7 conceptual translation of range 101-676)
<400>2451
Met Tyr Phe Phe Leu Tyr Phe Thr Asp Leu Glu Ser Phe Leu Leu Val
                                    10
Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe Pro Met His Tyr
           20
                                25
Thr Ala Ile Cys Phe Leu Leu His Tyr Thr Ala Ile Met Ser Pro Met
                           40
Leu Cys Leu Ser Val Val Ala Leu Ser Trp Val Leu Thr Thr Phe His
```

```
Ala Met Leu His Thr Leu Leu Met Ala Arg Leu Cys Phe Cys Ala Asp
                     70
                                         75
 Asn Val Ile Pro His Phe Phe Cys Asp Met Ser Ala Leu Leu Lys Leu
                                     90
 Ala Cys Ser Asp Thr Arg Val Asn Glu Trp Val Ile Phe Ile Met Gly
                                105
 Gly Leu Ile Leu Val Ile Pro Phe Leu Leu Ile Leu Gly Ser Tyr Ala
                            120
                                                 125
 Arg Ile Val Ser Ser Ile Leu Lys Val Pro Ser Ser Lys Gly Ile Cys
                        135
                                             140
Lys Ala Phe Ser Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Phe
                    150
                                        155
Tyr Gly Thr Val Ile Gly Leu Tyr Leu Cys Ser Ser Ala Asn Ser Ser
                165
                                    170
Thr Leu Lys Asp Thr Val Met Ala Met Met Tyr Thr Val Val Thr Pro
                                 185
<210> 2452
<211> 323
<212> PRT
<213> Unknown (p25-dir-0-11 conceptual translation of range 1-969)
<400>2452
Met Met Gly Gln Asn Gln Thr Ser Ile Ser Asp Phe Leu Leu Gly
 1
                                    10
Leu Pro Ile Gln Pro Glu Gln Gln Asn Leu Cys Tyr Ala Leu Phe Leu
                                25
Ala Met Tyr Leu Thr Thr Leu Leu Gly Asn Leu Leu Ile Ile Val Leu
                            40
Ile Arg Leu Asp Ser His Leu His Thr Pro Val Tyr Leu Phe Leu Ser
                        55
                                            60
Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys
                    70
                                        75
Leu Leu Gln Asn Met Gln Asn Gln Asp Pro Ser Ile Pro Tyr Ala Asp
Cys Leu Thr Gln Met Tyr Phe Phe Leu Tyr Phe Ser Asp Leu Glu Ser
            100
                                105
Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
        115
                            120
                                                125
Pro Met His Tyr Thr Ala Ile Cys Phe Leu Leu His Tyr Thr Ala Ile
                        135
                                            140
Met Ser Pro Met Leu Cys Leu Ser Val Val Ala Leu Ser Trp Val Leu
                    150
                                        155
Thr Thr Phe His Ala Met Leu His Thr Leu Leu Met Ala Arg Leu Cys
                165
                                    170
Phe Cys Ala Asp Asn Val Ile Pro His Phe Phe Cys Asp Met Ser Ala
            180
                                185
Leu Leu Lys Leu Ala Cys Ser Asp Thr Arg Val Asn Glu Trp Val Ile
        195
                            200
                                                205
Phe Ile Met Gly Gly Leu Ile Leu Val Ile Pro Phe Leu Leu Ile Leu
                        215
Gly Ser Tyr Ala Arg Ile Val Ser Ser Ile Leu Lys Val Pro Ser Ser
                    230
                                        235
Lys Gly Ile Cys Lys Ala Phe Ser Thr Cys Gly Ser His Leu Ser Val
                245
                                    250
Val Ser Leu Phe Tyr Gly Thr Val Ile Gly Leu Tyr Leu Cys Pro Ser
                                265
                                                    270
Ala Asn Ser Ser Thr Leu Lys Asp Thr Val Met Ala Met Met Tyr Thr
                            280
                                                285
Val Val Thr Pro Met Leu Thr Pro Phe Ile Tyr Ser Leu Arg Asn Arg
```

295

```
Asp Met Lys Gly Ala Leu Glu Arg Val Ile Cys Lys Arg Lys Asn Pro
                   310
Phe Leu Leu
<210> 2453
<211> 314
<212> PRT
<213> Unknown (p181-dir-0-11 conceptual translation of range 1-942)
Met Met Glu Gln Asn Gln Thr Ser Thr Ser Asp Phe Leu Leu Gly
                                    10
Leu Pro Ile Gln Pro Glu Gln Gln Asn Leu Cys Tyr Ala Leu Phe Leu
Ala Met Tyr Leu Thr Thr Leu Leu Gly Asn Leu Leu Ile Ile Val Leu
                            40
Ile Arg Leu Asp Ser His Leu His Thr Pro Val Tyr Leu Phe Leu Ser
                       55
                                            60
Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys
                                        75
                    70
Leu Leu Gln Asn Met Gln Ser Gln Asn Pro Ser Ile Pro Tyr Ala Asp
               85
                                    90
Cys Leu Thr Gln Met Tyr Phe Phe Leu Tyr Phe Ser Asp Leu Glu Ser
            100
                                105
                                                    110
Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
                            120
                                                125
Pro Leu His Tyr Thr Ala Ile Met Ser Pro Met Leu Cys Leu Ser Val
                        135
Val Ala Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His Thr
                    150
                                        155
Leu Leu Met Ala Arg Leu Cys Phe Cys Ala Asp Asn Val Ile Pro His
                165
                                    170
Phe Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp Thr
           180
                                185
                                                    190
Arg Val Asn Glu Trp Val Ile Phe Ile Met Gly Gly Leu Ile Val Val
                            200
                                                205
Ile Pro Phe Leu Leu Ile Leu Gly Ser Tyr Ala Arg Ile Val Ser Ser
                        215
                                            220
Ile Leu Lys Val Pro Ser Ser Lys Gly Ile Cys Lys Ala Leu Ser Thr
                   230
                                        235
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Val Ile
                245
                                    250
Gly Leu Tyr Leu Cys Pro Ser Ala Asn Ser Ser Thr Leu Lys Asp Thr
                                265
           260
                                                    270
Val Met Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
       275
                            280
                                                285
Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Gly Ala Leu Glu Arg Val
                        295
Ile Cys Lys Arg Lys Asn Pro Phe Leu Ile
                    310
<210> 2454
<211> 149
<212> PRT
<213> Unknown (p166-dir-0-6 conceptual translation of range 2-448)
<400>2454
Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Ile Pro Lys Leu Leu Gln
                                    10
Asn Met Gln Asn Gln Asp Pro Ser Ile Pro Tyr Val Asp Cys Leu Thr
```

```
25
Gln Met Tyr Phe Phe Leu Phe Phe Gly Asp Leu Glu Ser Phe Leu Leu
                           40
                                               45
Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe Pro Leu His
                                           60
                       55
Tyr Thr Ala Ile Met Ser Pro Met Leu Cys Leu Ala Leu Val Ala Leu
                                       75
                   70
Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His Thr Leu Leu Met
                                   90
               85
Ala Arg Leu Cys Phe Cys Ala Asp Asn Val Val Pro His Phe Phe Cys
           100
                               105
                                                    110
Asp Met Pro Ala Leu Leu Lys Leu Ala Cys Ser Asp Thr Arg Val Asn
                           120
                                               125
Glu Ser Gly Ile Phe Ile Thr Gly Gly Leu Ile Leu Gly Ile Pro Phe
                       135
Leu Leu Ile Leu Gly
145
<210> 2455
<211> 314
<212> PRT
<213> Unknown (p17-dir-0-11 conceptual translation of range 1-942)
<400>2455
Met Met Gly Gln Asn Gln Thr Ser Ile Ser Asp Phe Leu Leu Gly
                                    10
Leu Pro Ile Gln Pro Glu Gln Gln Asn Leu Cys Tyr Ala Leu Phe Leu
           20
                                25
Ala Met Tyr Leu Thr Thr Leu Leu Gly Asn Leu Leu Ile Ile Val Leu
                            40
       35
Ile Arg Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser
                                           60
Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Ile Pro Lys
                                       75
                   70
Leu Leu Gln Asn Met Gln Asn Gln Asp Pro Ser Ile Pro Tyr Ala Asp
                                    90
               85
Cys Leu Thr Gln Met Tyr Phe Phe Leu Leu Phe Gly Asp Leu Glu Ser
                               105
          . 100
Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
                                               125
                            120
Pro Leu His Tyr Thr Ala Ile Met Ser Pro Met Leu Cys Leu Ala Leu
                                           140
                       135
Val Ala Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His Thr
                                       155
                   150
Leu Leu Met Ala Arg Leu Cys Phe Cys Ala Asp Asn Val Ile Pro His
                                   170
               165
Phe Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ala Phe Ser Asp Thr
                               185
           180
Arg Val Asn Glu Trp Val Ile Phe Ile Met Gly Gly Leu Ile Leu Val
                                                205
       195
                            200
Ile Pro Phe Leu Leu Ile Leu Gly Ser Tyr Ala Arg Ile Val Ser Ser
                        215
                                            220
Ile Leu Lys Val Pro Ser Ser Lys Gly Ile Cys Lys Ala Phe Ser Thr
                                        235
                   230
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Val Ile
               245
                                    250
Gly Leu Tyr Leu Cys Ser Ser Ala Asn Ser Ser Thr Leu Lys Asp Thr
                               265
Val Met Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                                               285
                           280
Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Gly Ala Leu Ser Arg Val
```

```
295
                                            300
Ile His Gln Lys Lys Thr Phe Phe Ser Leu
                   310
<210> 2456
<211> 314
<212> PRT
<213> Unknown (p90-dir-0-11 conceptual translation of range 1-942)
<400>2456
Met Met Gly Gln Asn Gln Thr Ser Ile Ser Asp Phe Leu Leu Gly
Leu Pro Ile Gln Pro Glu Gln Gln Asn Leu Cys Tyr Ala Leu Phe Leu
Ala Met Tyr Leu Thr Thr Leu Leu Gly Asn Leu Leu Ile Ile Val Leu
                            40
Ile Arg Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser
                       55
                                           60
Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Ile Pro Lys
                   70
                                        75
Leu Leu Gln Asn Met Gln Asn Gln Asp Pro Ser Ile Pro Tyr Ala Asp
                                    90
Cys Leu Thr Gln Met His Phe Phe Leu Leu Phe Gly Asp Leu Glu Ser
                                105
Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
                            120
Pro Leu His Tyr Thr Ala Ile Met Ser Pro Met Leu Cys Leu Ser Val
                        135
Val Ala Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His Thr
                   150
                                        155
Leu Leu Met Ala Arg Leu Cys Phe Cys Ala Asp Asn Val Ile Pro His
                                    170
Phe Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp Thr
                                185
Arg Val Asn Glu Trp Val Ile Phe Ile Met Gly Gly Leu Ile Val Val
                            200
Ile Pro Phe Leu Leu Ile Leu Gly Ser Tyr Ala Arg Ile Val Ser Ser
                        215
                                            220
Ile Leu Lys Val Pro Ser Phe Lys Gly Ile Cys Lys Ala Leu Ser Thr
                   230
                                        235
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Val Ile
               245
                                   250
Gly Leu Tyr Leu Cys Pro Ser Ala Asn Ser Ser Thr Leu Lys Asp Thr
           260
                                265
Val Met Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                            280
Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Gly Ala Leu Glu Arg Val
                        295
                                            300
Ile Cys Lys Arg Lys Asn Pro Phe Leu Leu
                   310
<210> 2457
<211> 314
<213> Unknown (p175-dir-0-11 conceptual translation of range 1-942)
<400>2457
Met Met Gly Gln Asn Gln Thr Ser Ile Ser Asp Phe Leu Leu Gly
                                   10
Leu Pro Ile Gln Pro Glu Gln Gln Asn Leu Cys Tyr Ala Leu Phe Leu
                                25
```

```
Ala Met Tyr Leu Thr Thr Leu Leu Gly Asn Leu Leu Ile Ile Val Leu
                           40
                                               45
Ile Arg Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser
                                           60
                       55
Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Ile Pro Lys
                                        75
                   70
Leu Leu Gln Asn Met Gln Asn Gln Asp Pro Ser Ile Pro Tyr Ala Asp
               85
Cys Leu Thr Gln Met Tyr Phe Phe Leu Leu Phe Gly Asp Leu Glu Ser
                               105
           100
Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
                                               125
                           120
Pro Leu His Tyr Thr Ala Ile Met Ser Pro Met Leu Cys Leu Ser Val
                                           140
                       135
Val Ala Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His Thr
                                       155
                   150
Leu Leu Met Ala Arg Leu Cys Phe Cys Ala Asp Asn Val Ile Pro His
               165
                                   170
Phe Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp Thr
                                                    190
           180
                               185
Arg Val Asn Glu Trp Val Ile Phe Ile Met Gly Gly Leu Ile Leu Val
                                               205
                           200
       195
Ile Pro Phe Leu Leu Ile Leu Gly Ser Tyr Ala Arg Ile Val Ser Ser
                                            220
                       215
Ile Leu Lys Val Pro Ser Ser Lys Gly Ile Cys Lys Ala Leu Ser Thr
                   230
                                        235
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Val Ile
                                   250
               245
Gly Leu Tyr Leu Cys Pro Ser Ala Asn Ser Ser Thr Leu Lys Asp Thr
                               265
Val Met Ala Met Ile Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                                               285
                          280
Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Gly Ala Leu Ser Arg Val
                    295
Ile His Gln Lys Lys Thr Phe Phe Ser Leu
<210> 2458
<211> 314
<212> PRT
<213> Unknown (p170-dir-0-11 conceptual translation of range 1-942)
<400>2458
Met Met Gly Gln Asn Gln Thr Ser Ile Ser Asp Phe Leu Leu Gly
               - 5
                                   10
Leu Pro Ile Gln Pro Glu Gln Gln Asn Leu Cys Tyr Ala Leu Phe Leu
                               25
           20
Ala Met Tyr Leu Thr Thr Leu Leu Gly Asn Leu Leu Ile Ile Val Leu
       35
                           40
Ile Arg Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser
                                           60
                       55
Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Ile Pro Lys
                                        75
                   70
Leu Leu Gln Asn Met Gln Asn Gln Asp Pro Ser Ile Pro Tyr Ala Asp
                                   90
Cys Leu Thr Gln Met Tyr Phe Phe Leu Leu Phe Gly Asp Leu Glu Ser
                               105
Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
                                               125
                           120
Pro Leu His Tyr Thr Ala Ile Met Ser Pro Met Leu Cys Leu Ser Leu
                       135
    130
```

```
Val Ala Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His Thr
                  150
Leu Leu Met Ala Arg Leu Cys Phe Cys Ala Asp Asn Val Ile Pro His
                                    170
Phe Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp Thr
                               185
Arq Val Asn Glu Trp Val Ile Phe Ile Met Gly Gly Leu Ile Val Val
                           200
                                                205
Ile Pro Phe Leu Leu Ile Leu Gly Ser Tyr Ala Arg Ile Val Ser Ser
                        215
                                            220
Ile Leu Lys Val Pro Ser Ser Lys Gly Ile Cys Lys Ala Phe Ser Thr
                    230
                                        235
225
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile
                245
                                    250
Gly Leu Tyr Leu Cys Pro Ser Ala Asn Ser Ser Thr Leu Lys Glu Thr
           260
                                265
                                                    270
Val Met Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                                                285
        275
                            280
Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Gly Ala Leu Glu Arg Val
                        295
Ile Cys Lys Arg Lys Asn Pro Phe Leu Leu
<210> 2459
<211> 314
<212> PRT
<213> Unknown (p31-dir-0-11 conceptual translation of range 1-942)
<400>2459
Met Met Gly Gln Asn Gln Thr Ser Ile Ser Asp Phe Leu Leu Gly
                                    10
Leu Pro Ile Gln Pro Glu Gln Gln Asn Leu Cys Tyr Ala Leu Phe Leu
                                25
Ala Met Tyr Leu Thr Thr Leu Leu Gly Asn Leu Leu Ile Ile Val Leu
       35
                            40
                                                45
Ile Arg Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser
                        55
                                            60
Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Ile Pro Lys
                    70
                                        75
Leu Leu Gln Asn Met Gln Asn Gln Asp Pro Ser Ile Pro Tyr Ala Asp
                                    90
               85
Cys Leu Thr Gln Met Tyr Phe Phe Leu Leu Phe Gly Asp Leu Glu Ser
                                105
           100
Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
                            120
                                                125
Ala Leu His Tyr Thr_Ala Ile_Met Ser Pro Met Leu Cys Leu Ser Leu
                        135
                                            140
Val Ala Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His Thr
                   150
                                        155
Leu Leu Met Ala Arg Leu Cys Phe Cys Ala Asp Asn Val Ile Pro His
                                   170
               165
Phe Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp Thr
           180
                                185
Arg Val Asn Glu Trp Val Ile Phe Ile Met Gly Gly Leu Ile Val Val
                            200
                                                205
Ile Pro Phe Leu Leu Ile Leu Gly Ser Tyr Ala Arg Ile Val Ser Ser
                       215
                                            220
Ile Leu Lys Val Pro Ser Ser Lys Gly Ile Cys Lys Ala Phe Ser Thr
                                        235
                   230
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Val Ile
                                    250
```

```
Gly Leu Tyr Leu Cys Pro Ser Ala Asn Ser Ser Thr Leu Lys Glu Thr
                               265
           260
Val Met Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                           280
       275
Ile Tyr Ser Leu Arg Asn Gly Asp Met Lys Gly Ala Leu Ser Arg Val
                      295
Ile His Gln Lys Lys Thr Phe Phe Ser Leu
                  310
<210> 2460
<211> 324
<212> PRT
<213> Unknown (890-dir-5-12 conceptual translation of range 642-1613)
<220>
<221> VARIANT
<222> (1)...(324)
<223> Xaa = Any Amino Acid
<400>2460
Arg Gln Ser Met Thr Glu Lys Asn Gln Thr Val Val Ser Glu Phe Val
                          10
Leu Leu Gly Leu Pro Ile Asp Pro Asp Gln Arg Asp Leu Phe Tyr Ala
                              25
           20
Leu Phe Leu Ala Met Tyr Val Thr Thr Ile Leu Gly Asn Leu Leu Ile
      35
                           40
Ile Val Leu Ile Gln Leu Asp Ser His Leu His Thr Pro Met Tyr Leu
                       55
Phe Leu Ser Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr
                  70
                                       75
Met Pro Lys Leu Leu Gln Asn Met Gln Ser Gln Val Pro Ser Ile Pro
                                   90
Tyr Ala Gly Cys Leu Thr Gln Met Tyr Phe Phe Leu Phe Phe Gly Asp
                                                  110
           100
                               105
Leu Glu Ser Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala
                                               125
                           120
Ile Cys Phe Pro Leu His Tyr Thr Thr Ile Met Ser Pro Lys Leu Cys
                       135
                                           140
Phe Ser Leu Leu Val Leu Ser Trp Val Leu Thr Met Phe His Ala Val
                                      155
                   150
Leu His Thr Leu Leu Met Ala Arg Leu Cys Phe Cys Ala Asn Thr Ile
                                   170
               165
Pro His Phe Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ala Cys Ser
                                                  190
                               185
Asp Thr Gln Val Asn Glu Leu Val Ile Phe Ile Met Gly Gly Leu Ile
                                               205
                           200
Leu Val Ile Pro Phe Leu Leu Ile Ile Thr Ser Tyr Ala Arg Ile Val
                       215
                                           220
Ser Ser Ile Leu Lys Val Pro Ser Ala Ile Gly Ile Cys Lys Val Phe
                                       235
                   230
Ser Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr
               245
                                   250
Val Ile Gly Leu Tyr Leu Cys Pro Ser Ala Asn Asn Ser Thr Val Lys
                               265
           260
Glu Thr Ile Met Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn
                                               285
                           280
Pro Phe Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys Gly Ala Leu Arg
                       295
                                          300
Arg Val Ile Cys Arg Lys Lys Ile Thr Phe Ser Val Xaa Trp Xaa His
                   310
                                       315
```

Leu Ile Leu Leu

```
<210> 2461
<211> 162
<212> PRT
<213> Unknown (4877306-dir-0-6 conceptual translation of range 2-487)
<400>2461
Val Ala Ile Cys Phe Pro Leu His Tyr Thr Thr Ile Met Ser Pro Arg
                                    10
               5
Leu Cys Leu Phe Leu Val Leu Leu Pro Trp Ile Leu Thr Thr Phe His
                               25
Ala Met Leu His Thr Leu Leu Met Ala Arg Leu His Phe Cys Glu Asp
Asn Val Ile Pro His Phe Phe Cys Asp Ser Ser Ala Leu Leu Lys Leu
Ser Cys Ser Asp Thr Arg Val Asn Glu Leu Val Ile Phe Phe Val Gly
                    70
                                        75
Gly Leu Ile Ile Ile Pro Phe Leu Leu Ile Ile Met Ser Tyr Ala
                                                       95
                                    90
Arg Ile Val Ser Ser Ile Leu Lys Val Pro Ser Ala Lys Gly Ile Cys
           100
                                105
Lys Ala Phe Ser Thr Cys Gly Ser His Leu Thr Val Val Ser Leu Phe
                            120
Tyr Gly Thr Ile Ile Gly Leu Tyr Leu Cys Pro Ser Ala His Asn Ser
                                           140
                       135
Thr Val Lys Glu Thr Val Met Ser Met Met Tyr Thr Val Val Ala Pro
Met Leu
<210> 2462
<211> 216
<212> PRT
<213> Unknown (p194-dir-0-8 conceptual translation of range 2-649)
<400>2462
Phe Thr Asp Leu Cys Phe Ser Thr Val Thr Met Pro Asn Phe Leu Gln
                                    10
Asn Met Gln Ser Gln Val Ser Ser Ile Pro Tyr Ala Gly Cys Leu Ala
           20
Gln Met Tyr Phe Phe Leu Phe Phe Gly Asp Val Glu Ser Leu Leu
                           40
Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe Pro Leu His
                       55
                                           60
Tyr Thr Arg Ile Met Ser Pro Asn Leu Cys Val Ser Met Val Leu Leu
                   70
                                       75
Ser Trp Ala Leu Thr Thr Leu Cys Ala Met Leu His Thr Leu Leu Leu
                                   90
               85
Thr Arg Leu Ser Phe Cys Lys Asn Asn Val Ile Pro His Phe Phe Cys
                               105
Asp Leu Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp Ile His Ile Asn
                           120
                                               125
Glu Leu Met Ile Met Ile Ile Gly Ala Leu Val Val Ile Leu Pro Phe
                       135
                                           140
Leu Leu Ile Ile Val Ser Tyr Ala His Ile Val Ser Ser Ile Leu Lys
                   150
                                        155
Val Pro Ser Thr Arg Gly Ile His Lys Val Phe Ser Thr Cys Gly Ser
                                   170
               165
His Leu Ser Val Val Ser Leu Phe Tyr Gly Ser Val Ile Val Leu Tyr
                               185
```

```
Leu Cys Pro Ser Ser Asn Asn Ser Thr Val Lys Asp Thr Val Met Ser
                          200
       195
Met Met Tyr Thr Val Val Thr Pro
<210> 2463
<211> 157
<212> PRT
<213> Unknown (902674-dir-0-6 conceptual translation of range 2-472)
Ile Cys Phe Pro Leu His Tyr Thr Arg Ile Met Ser Pro Asn Leu Cys
                                    10
Val Ser Met Val Leu Leu Ser Trp Ala Leu Thr Thr Leu Cys Ala Met
                                25
            20
Leu Arg Thr Leu Leu Leu Thr Arg Leu Ser Phe Cys Lys Asn Asn Val
       35
                           40
Ile Pro His Phe Phe Cys Asp Leu Ser Ala Leu Leu Lys Leu Ala Cys
                       55
                                           60
Ser Asp Ile His Ile Asn Glu Leu Met Ile Met Ile Ile Gly Ala Leu
                                        75
                   70
Val Val Ile Leu Pro Phe Leu Leu Ile Ile Val Ser Tyr Ala His Ile
                                    90
               85
Val Ser Ser Ile Leu Lys Val Pro Ser Thr Arg Gly Ile His Lys Val
            100
                                105
                                                    110
Phe Ser Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly
                                                125
        115
                           120
Ser Val Ile Val Leu Tyr Leu Cys Pro Ser Ser Asn Asn Ser Thr Val
                       135
Lys Asp Thr Val Met Ser Met Met Tyr Thr Val Val Thr
<210> 2464
<211> 216
<212> PRT
<213> Unknown (p197-dir-0-8 conceptual translation of range 2-649)
<220>
<221> VARIANT
<222> (1)...(216)
<223> Xaa = Any Amino Acid
<400>2464
Phe Thr Asp Leu Xaa Phe Ser Ser Val Thr Met Pro Lys Leu Leu Gln
                                   10
           5
Asn Met Gln Ser Gln Val Pro Ser Ile Pro Tyr Ala Gly Cys Leu Thr
                                25
                                                    30
           20
Gln Met Tyr Phe Leu Leu Phe Phe Gly Asp Leu Glu Ser Phe Leu Leu
       35
Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe Pro Leu His
                                            60
                        55
Tyr Thr Ser Ile Met Ser Pro Arg Leu Cys Val Ser Leu Val Leu Leu
                                        75
                   70
65
Ser Trp Leu Leu Thr Met Ser His Ser Met Leu His Thr Leu Leu Leu
               85
                                    90
Thr Arg Leu Ser Phe Cys Glu Asn Asn Val Ile Pro His Phe Phe Cys
                               105
Asp Leu Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp Ile His Ile Asn
                                               125
                           120
Glu Leu Val Ile Leu Ile Ile Gly Gly Leu Val Val Ile Leu Pro Phe
   130
                        135
```

```
Leu Leu Ile Thr Val Ser Tyr Ala Arg Ile Ile Ser Ser Ile Leu Lys
                                      155
                  150
Val Pro Ser Thr Gln Gly Ile His Lys Val Phe Ser Thr Cys Gly Ser
                165
                                   170
His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile Gly Leu Tyr
                              185
           180
Leu Cys Pro Ser Ala Asn Asn Ser Thr Leu Lys Asp Thr Val Met Ser
                        200
       195
Met Met Tyr Thr Val Val Thr Pro
<210> 2465
<211> 216
<212> PRT
<213> Unknown (p195-dir-0-8 conceptual translation of range 2-650)
Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys Leu Leu Leu
                                   10
Asn Met Gln Ser Gln Ile Pro Ser Ile Ser Tyr Ala Ser Cys Leu Ala
                                                   30
           20
                               25
Gln Met Tyr Phe Phe Leu Phe Phe Gly Ala Leu Glu Asn Phe Leu Leu
                           40
       35
Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe Pro Leu His
                       55
                                            60
Tyr Thr Ser Ile Met Ser Pro Arg Leu Cys Val Ser Met Val Val Met
Cys Trp Val Leu Thr Thr Phe Asp Ala Met Leu His Thr Leu Leu Met
                                    90
Ala Arg Leu Ser Phe Cys Glu Asp Asn Val Ile Pro His Phe Phe Cys
                               105
Asp Met Ser Ala Leu Leu Lys Leu Ser Cys Ser Asp Thr His Val Asn
                                               125
                           120
Glu Val Val Ile Phe Ile Gly Gly Leu Gly Val Val Leu Pro Phe
                       135
                                            140
Leu Leu Ile Thr Val Ser Tyr Ala Arg Ile Ile Ser Ser Ile Leu Lys
                   150
                                       155
Val Pro Ser Thr Gln Gly Ile Gln Lys Val Phe Ser Thr Cys Gly Ser
                                    170
His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile Gly Leu Tyr
                               185
                                                   190
Leu Gly Pro Ser Ala Tyr Tyr Ser Thr Leu Lys Asp Thr Val Met Ser
                          200
Met Met Tyr Thr Val Val Thr Pro
                       215
    210
<210> 2466
<211> 157
<212> PRT
<213> Unknown (902672-dir-0-6 conceptual translation of range 2-472)
<400>2466
Ile Cys Phe Pro Leu His Tyr Thr Ser Ile Met Ser Pro Arg Leu Cys
                                    10
Val Ser Met Val Val Met Cys Arg Val Leu Thr Thr Phe Asp Ala Met
                                25
            20
Leu His Thr Leu Leu Met Ala Arg Leu Ser Phe Cys Glu Asp Asn Val
Ile Pro His Phe Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ser Cys
                       55
Ser Asp Thr His Val Asn Glu Val Val Ile Phe Ile Gly Gly Leu
```

```
70
Gly Val Val Leu Pro Phe Leu Leu Ile Thr Val Ser Tyr Ala Arg Ile
                                    90
               85
Ile Ser Ser Ile Leu Lys Val Pro Ser Thr Gln Gly Ile Gln Lys Val
           100
                                105
Phe Ser Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly
                           120
                                               125
Thr Ile Ile Gly Leu Tyr Leu Gly Pro Ser Ala Tyr Tyr Ser Thr Leu
                      135
                                           140
Lys Asp Thr Val Met Ser Met Met Tyr Thr Val Val Thr
                   150
<210> 2467
<211> 216
<212> PRT
<213> Unknown (p196-dir-0-8 conceptual translation of range 2-649)
<400>2467
Phe Ser Asp Phe Cys Phe Ser Ser Val Thr Ile Pro Lys Leu Leu Gln
                                 . 10
Asn Met Gln Ser Gln Val Pro Ser Ile Pro Tyr Ala Gly Cys Leu Ala
                                                    30
                                25
Gln Met Tyr Phe Phe Leu Leu Phe Ala Asp Leu Glu Ser Phe Leu Leu
       35
                           40
Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe Pro Leu His
                       55
                                            60
Tyr Thr Ser Ile Met Ser Pro Lys Leu Cys Leu Cys Leu Val Ala Leu
                   70
                                       75
Ser Trp Leu Leu Thr Thr Val Ile Ser Leu Ser His Thr Leu Leu Met
                                    90
               85
Ala Arg Leu Ser Phe Cys Ala Asn Asn Val Ile Pro His Phe Phe Cys
                               105
           100
Asp Met Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp Ile Gln Ile Asn
                           120
                                               125
Lys Leu Met Ile Phe Ile Leu Gly Gly Leu Val Ile Ile Val Pro Phe
                                           140
                       135
Leu Leu Ile Phe Ser Ser Tyr Ala Arg Ile Val Ser Ser Ile Leu Lys
                                       155
                   150
Val Pro Ser Ser Arg Ser Ile Arg Lys Ala Phe Ser Thr Cys Gly Ser
                                   170
                                                        175
               165
His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile Gly Leu Tyr
                               185
                                                    190
           180
Leu Cys Pro Ser Ala Asn Asn Ser Thr Ile Lys Glu Thr Val Met Ala
      195
                           200
Val Met Tyr Thr Val Val Thr Pro
   210
                       215
<210> 2468
<211> 216
<212> PRT
<213> Unknown (p91-dir-0-8 conceptual translation of range 2-649)
<400>2468
Phe Ser Asp Met Cys Phe Ser Ser Val Ser Ile Pro Lys Leu Leu Val
                                    10
Asn Met Gln Ser Lys Lys Pro Ala Ile Pro Tyr Ala Gly Cys Leu Ser
                               25
           20
Gln Met Tyr Phe Phe Leu Phe Phe Ala Asp Leu Glu Ser Phe Leu Leu
                                                45
                           40
Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu His
                                            60
                       55
```

```
Tyr Ile Val Ile Met Ser Pro Lys Leu Cys Ser Ser Leu Val Val Leu
                                       75
Ser Trp Val Leu Thr Ala Phe His Ala Leu Leu His Thr Leu Leu Met
                                   90
Ser Arg Leu Ser Phe Cys Ala Asn Asn Val Ile Pro His Phe Phe Cys
                               105
                                                   110
Asp Met Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp Thr Gln Pro Asn
                                               125
                           120
Glu Leu Val Ile Phe Val Thr Gly Gly Leu Ile Leu Val Val Pro Phe
                                            140
                       135
Leu Leu Ile Ile Thr Ser Tyr Ala His Ile Ile Ser Ser Ile Leu Arg
                   150
                                        155
Val Pro Ser Val Arg Gly Ile Arg Lys Ala Phe Ser Thr Cys Gly Ser
                                    170
               165
His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Val Ile Gly Leu Tyr
                               185
                                                    190
           180
Leu Cys Pro Ser Thr Asn Asn Ser Thr Val Lys Glu Thr Val Met Ser
                                                205
                            200
Ile Met Tyr Thr Val Val Thr Pro
<210> 2469
<211> 314
<212> PRT
<213> Unknown (p29-dir-0-11 conceptual translation of range 1-942)
<400>2469
Met Met Lys Lys Asn Gln Thr Met Ile Ser Glu Phe Leu Leu Gly
Leu Pro Ile Gln Pro Glu Gln Arg Asn Leu Phe Tyr Ala Leu Phe Leu
           20
                                25
Ala Val Tyr Leu Thr Thr Leu Leu Gly Asn Leu Leu Val Ile Val Leu
                            40
                                                45
Ile Arg Leu Asp Ser His Leu His Met Pro Met Tyr Leu Cys Leu Ser
                        55
                                            60
Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys
                                        75
                    70
Leu Leu Gln Asn Met Gln Ser Gln Asn Pro Ser Ile Pro Phe Ala Asp
                                    90
               85
Cys Leu Ala Gln Met Tyr Phe His Leu Phe Tyr Gly Val Leu Glu Ser
                                105
           100
Phe Leu Leu Val Val Met Ala Tyr His Cys Tyr Val Ala Ile Cys Phe
                                                125
                            120
Pro Leu His Tyr Thr Thr Ile Met Ser Pro Lys Cys Cys Leu Gly Leu
                        135
                                            140
Leu Thr Leu Ser Trp Leu Leu Thr Thr Ala His Ala Thr Leu His Thr
                    150
                                        155
Leu Leu Met Ala Arg Leu Ser Phe Cys Ala Glu Asn Val Ile Pro His
                165
                                   170
Phe Phe Cys Asp Thr Ser Thr Leu Leu Lys Leu Ala Cys Ser Asn Thr
                                185
           180
Gln Val Asn Gly Trp Val Met Phe Phe Met Gly Gly Leu Ile Leu Val
                                                205
                            200
Ile Pro Phe Leu Leu Ile Met Ser Cys Ala Arg Ile Val Ser Thr
                                            220
                        215
Ile Leu Arg Val Pro Ser Thr Gly Gly Ile Gln Lys Ala Phe Ser Thr
                   230
                                        235
Cys Gly Pro His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile
                                    250
Gly Leu Tyr Leu Cys Pro Leu Thr Asn His Asn Thr Val Lys Asp Thr
                                265
```

```
Val Met Ala Val Met Tyr Thr Gly Val Thr His Met Leu Asn Pro Phe
                            280
Ile Tyr Ser Leu Arg Asn Arg Asp Met Arg Gly Thr Leu Gly Arg Val
                       295
   290
Phe Ser Thr Lys Lys Ile Phe Leu Ser Leu
                   310
<210> 2470
<211> 314
<212> PRT
<213> Unknown (p132-dir-0-11 conceptual translation of range 1-942)
<400>2470
Met Thr Lys Lys Asn Gln Thr Met Ile Ser Glu Phe Leu Leu Gly
                                    10
Leu Pro Ile Gln Pro Glu Gln Gln Asn Leu Phe Tyr Ala Leu Phe Leu
                               25
           20
Ala Met Tyr Leu Thr Thr Leu Leu Gly Asn Leu Leu Ile Ile Val Leu
                                               45
       35
                           40
Ile Arg Leu Asp Ser His Leu His Thr Pro Val Tyr Leu Cys Leu Ser
                                          60
                       55
Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys
                                       75
                   70
Leu Leu Gln Asn Met Gln Ser Gln Asn Pro Ser Ile Pro Phe Ala Asp
               85
                                    90
Cys Leu Ala Gln Met Tyr Phe His Leu Phe Tyr Gly Val Leu Glu Ser
                                105
           100
Phe Leu Leu Val Val Met Ala Tyr His Cys Tyr Val Ala Ile Cys Phe
                            120
                                               125
       115
Pro Leu Gln Tyr Thr Thr Ile Met Ser Ser Lys Gly Cys Leu Ala Leu
                                           140
                       135
Leu Thr Leu Ser Trp Leu Leu Thr Thr Ala His Ala Arg Leu His Thr
                                       155
                   150
Leu Leu Met Ala Arg Leu Ser Phe Cys Ala Asp Asn Val Ile Pro His
                                   170
               165
Phe Phe Cys Asp Thr Ser Thr Leu Leu Lys Leu Ala Cys Ser Asp Thr
                               185
          180
Gln Val Asn Gly Trp Val Met Phe Phe Thr Gly Gly Leu Ile Leu Val
                           200
                                               205
       195
Ile Pro Phe Leu Leu Ile Met Ser Tyr Ala Arg Ile Leu Ser Thr
                                           220
                       215
Ile Leu Arg Val Pro Cys Ala Gly Gly Ile Gln Lys Ala Phe Ser Thr
                                        235
                   230
Cys Gly Pro His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile
                                    250
               245
Gly Leu Tyr Leu Cys Pro Ser Thr Asn His Asn Thr Val Lys Asp Thr
                                                    270
                                265
           260
Val Met Ala Val Met Tyr Thr Gly Val Thr His Met Leu Asn Pro Phe
                           280
                                              285
Ile Tyr Ser Leu Arg Asn Arg Asp Met Arg Gly Asn Pro Gly Gln Ser
                       295
Leu Gln His Lys Glu Asn Phe Phe Val Phe
                   310
<210> 2471
<211> 310
<213> Unknown (205831-dir-0-11 conceptual translation of range 1-930)
<400>2471
```

Met Asn Asn Gln Thr Phe Ile Thr Gln Phe Leu Leu Gly Leu Pro

```
10
Ile Pro Glu Glu His Gln His Leu Phe Tyr Ala Leu Phe Leu Val Met
                               25
Tyr Leu Thr Thr Ile Leu Gly Asn Leu Leu Ile Ile Val Leu Val Gln
                           40
Leu Asp Ser Gln Leu His Thr Pro Met Tyr Leu Phe Leu Ser Asn Leu
                       55
Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys Leu Leu
                   70
                                       75
Gln Asn Met Arg Ser Gln Asp Thr Ser Ile Pro Tyr Gly Gly Cys Leu
               85
                                   90
Ala Gln Thr Tyr Phe Phe Met Val Phe Gly Asp Met Glu Ser Phe Leu
           100
                              105
                                                   110
Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe Pro Leu
                                               125
                           120
       115
His Tyr Thr Ser Ile Met Ser Pro Lys Leu Cys Thr Cys Leu Val Leu
                       135
                                           140
Leu Leu Trp Met Leu Thr Thr Ser His Ala Met Met His Thr Leu Leu
                   150
                                       155
Ala Ala Arg Leu Ser Phe Cys Glu Asn Asn Val Val Leu Asn Phe Phe
               165
                                  170
Cys Asp Leu Phe Val Leu Leu Lys Leu Ala Cys Ser Asp Thr Tyr Ile
                              185
           180
Asn Glu Leu Met Ile Phe Ile Met Ser Thr Leu Leu Ile Ile Ile Pro
                           200
                                              205
Phe Phe Leu Ile Val Met Ser Tyr Ala Arg Ile Ile Ser Ser Ile Leu
                       215
                                          220
Lys Val Pro Ser Thr Gln Gly Ile Cys Lys Val Phe Ser Thr Cys Gly
                                       235
                  230
Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile Gly Leu
                                   250
Tyr Leu Cys Pro Ala Gly Asn Asn Ser Thr Val Lys Glu Met Val Met
            260
                               265
Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe Ile Tyr
                           280
Ser Leu Arg Asn Arg Asp Met Lys Arg Ala Leu Ile Arg Val Ile Cys
Ser Met Lys Ile Thr Leu
<210> 2472
<211> 221
<212> PRT
<213> Unknown (3769635-dir-0-8 conceptual translation of range 1-663)
<400>2472
Gly Asn Met Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Leu
                                   10
Lys Leu Leu Gln Asn Ile Gln Ser Gln Val Pro Ser Ile Ser Tyr Ala
                               25
         . 20
Gly Cys Leu Thr Gln Ile Phe Phe Phe Leu Leu Phe Gly Tyr Leu Gly
                                               45
                           40
Asn Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys
                                           60
                       55
Phe Pro Leu His Tyr Thr Asn Ile Met Ser His Lys Leu Cys Thr Cys
                   70
                                     . 75
Leu Leu Leu Val Phe Trp Ile Met Thr Ser Ser His Ala Met Val His
                                   90
Thr Leu Leu Ala Ala Arg Leu Ser Phe Cys Glu Asn Asn Val Leu Leu
                               105
Asn Phe Phe Cys Asp Leu Phe Val Leu Leu Lys Leu Ala Cys Ser Asp
```

```
120
                                               125
        115
Thr Tyr Val Asn Glu Leu Met Ile His Ile Met Gly Val Ile Ile Ile
                      135
                                           140
Val Ile Pro Phe Val Leu Ile Val Ile Ser Tyr Ala Lys Ile Ile Ser
                                       155
                  150
Ser Ile Leu Lys Val Pro Ser Thr Gln Ser Ile His Lys Val Phe Ser
                                   170
                                                       175
               165
Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile
                                                  190
           180
                               185
Ile Gly Leu Tyr Leu Cys Pro Ser Gly Asp Asn Phe Ser Leu Lys Gly
                        200
       195
Ser Ala Met Ala Met Met Tyr Thr Val Val Thr Pro Met
                       215
   210
<210> 2473
<211> 221
<212> PRT
<213> Unknown (3769637-dir-0-8 conceptual translation of range 1-663)
<400>2473
Gly Asn Met Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro
                5
                                   10
1
Lys Leu Leu Gln Asn Met Gln Ser Gln Val Pro Ser Ile Ser Tyr Ala
                               25
            20
Gly Cys Leu Thr Gln Leu Tyr Phe Phe Met Val Phe Ala Asp Met Glu
                           40
       35
Ser Phe Leu Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys
                       55
                                           60
Phe Pro Leu His Tyr Thr Thr Ile Met Ser Thr Lys Val Cys Ala Ser
                                       75
                   70
Leu Leu Ile Leu Leu Trp Met Leu Thr Thr Ser His Ala Leu Leu His
                                   90
               85
Thr Leu Leu Met Ala Arg Leu Ser Phe Cys Glu Lys Asn Val Ile Leu
                                105
                                                   110
            100
His Phe Phe Cys Asp Ile Thr Ala Leu Leu Lys Leu Ser Cys Ser Asp
                           120
       115
Thr Tyr Val Asn Glu Met Met Met His Ile Leu Gly Gly Leu Ile Ser
                                           140
                       135
   130
Val Ile Pro Phe Leu Phe Ile Val Met Ser Tyr Val Arg Ile Phe Phe
                   150
                                       155
Ser Ile Leu Lys Phe Pro Ser Ile Gln Asp Ile His Lys Val Phe Ser
               165
                                   170
Thr Cys Gly Ser His Leu Ser Val Val Thr Leu Phe Tyr Gly Thr Ile
                                                   190
                                185
            180
Phe Gly Leu Tyr Leu Cys Pro Ser Gly Asn Asn Ser Thr Val Lys Glu
        195
                          200
Ile Ala Met Ala Met Met Tyr Thr Val Val Thr Pro Met
                        215
   210
<210> 2474
<211> 221
<212> PRT
<213> Unknown (3769639-dir-0-8 conceptual translation of range 1-663)
<220>
<221> VARIANT
<222> (1) ... (221)
<223> Xaa = Any Amino Acid
<400>2474
```

Gly Asn Phe Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro

```
10
Lys Leu Leu Gln Asn Met Gln Ser Gln Val Pro Ser Ile Ser Tyr Ala
                               25
Gly Cys Leu Thr Gln Leu Tyr Phe Phe Met Val Phe Ala Asp Met Glu
                            40
Ser Phe Leu Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys
                       55
Phe Pro Leu His Tyr Thr Thr Ile Met Ser Thr Lys Val Cys Ala Ser
Leu Leu Ile Leu Leu Xaa Met Leu Thr Thr Ser His Ala Pro Leu His
                                    90
Thr Leu Leu Met Ala Arg Leu Pro Phe Tyr Glu Lys Asn Val Ile Leu
                               105
His Phe Phe Cys Asp Val Thr Ala Leu Leu Lys Leu Ser Cys Ser Asp
                           120
Thr Tyr Val Asn Glu Met Met Met Tyr Ile Leu Gly Gly Leu Ile Ser
                       135
                                           140
Val Ile Pro Phe Leu Phe Ile Val Met Ser Tyr Val Arg Ile Phe Phe
                                       155
                   150
Ser Ile Leu Lys Phe Pro Ser Ile Gln Asp Ile His Lys Val Phe Ser
                                   170
               165
Thr Cys Gly Ser His Leu Ser Val Val Thr Leu Phe Tyr Gly Thr Ile
                               185
Phe Gly Leu Tyr Leu Cys Pro Ser Gly Asn Asn Ser Thr Val Lys Glu
                            200
Ile Ala Met Ala Met Met Tyr Thr Val Val Thr Pro Met
                       215
<210> 2475
<211> 312
<212> PRT
<213> Unknown (205843-dir-0-11 conceptual translation of range 1-936)
<400>2475
Met Thr Gly Asn Asn Gln Thr Leu Ile Leu Glu Phe Leu Leu Cly
Leu Pro Ile Pro Ser Glu Tyr His Leu Leu Phe Tyr Ala Leu Phe Leu
                               25
Ala Met Tyr Leu Thr Ile Ile Leu Gly Asn Leu Leu Ile Ile Val Leu
                            40
Val Arg Leu Asp Ser His Leu His Met Pro Met Tyr Leu Phe Leu Ser
                       55
Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys
                   70
Leu Leu Gln Asn Met Gln Ser Gln Val Pro Ser Ile Ser Tyr Thr Gly
Cys Leu Thr Gln Leu Tyr Phe Phe Met Val Phe Gly Asp Met Glu Ser
           100
                                105
Phe Leu Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
                            120
Pro Leu Arg Tyr Thr Thr Ile Met Ser Thr Lys Phe Cys Ala Ser Leu
                       135
                                           140
Val Leu Leu Trp Met Leu Thr Met Thr His Ala Leu Leu His Thr
                   150
                                       155
Leu Leu Ile Ala Arg Leu Ser Phe Cys Glu Lys Asn Val Ile Leu His
                                   170
               165
Phe Phe Cys Asp Ile Ser Ala Leu Leu Lys Leu Ser Cys Ser Asp Ile
                               185
           180
Tyr Val Asn Glu Leu Met Ile Tyr Ile Leu Gly Gly Leu Ile Ile Ile
                            200
Ile Pro Phe Leu Leu Ile Val Met Ser Tyr Val Arg Ile Phe Phe Ser
```

```
215
                                           220
   210
Ile Leu Lys Phe Pro Ser Ile Gln Asp Ile Tyr Lys Val Phe Ser Thr
                                      235
                   230
Cys Gly Ser His Leu Ser Val Val Thr Leu Phe Tyr Gly Thr Ile Phe
               245
                                   250
Gly Ile Tyr Leu Cys Pro Ser Gly Asn Asn Ser Thr Val Lys Glu Ile
                                                   270
                               265
           260
Ala Met Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                                     285
                         280
Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Arg Ala Leu Ile Arg Val
                   295
Ile Cys Thr Lys Lys Ile Ser Leu
<210> 2476
<211> 216
<212> PRT
<213> Unknown (p198-dir-0-8 conceptual translation of range 2-649)
<400>2476
Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Ile Pro Lys Leu Leu Gln
                                  10
Asn Met Gln Ser Gln Val Pro Thr Ile Ser Tyr Ala Asp Cys Leu Thr
                               25
                                                   30
Gln Leu Tyr Phe Phe Met Val Phe Gly Asp Met Glu Ser Phe Leu Leu
    35
                           40
Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe Pro Leu His
                       55
                                           60
Tyr Thr Ser Ile Met Ser Thr Lys Phe Cys Ala Leu Leu Val Leu Leu
                                       75
                   70
65
Leu Trp Met Leu Thr Ile Ser His Ala Leu Leu His Thr Leu Leu Met
                                   90
Ala Arg Leu Ser Phe Cys Glu Lys Asn Val Ile Leu His Phe Phe Cys
                               105
                                                  110
Asp Ile Ser Ala Leu Leu Lys Leu Ser Cys Ser Asp Thr Tyr Val Asn
                           120
                                               125
Glu Leu Met Ile Phe Ile Met Gly Gly Ile Ile Ser Ile Ile Pro Phe
                       135
                                           140
Leu Leu Ile Val Met Ser Tyr Val Arg Ile Phe Phe Ser Ile Leu Lys
                                      155
                   150
Val Pro Ser Ser Gln Asp Ile His Lys Val Phe Ser Thr Cys Gly Ser
                                  170
                                                      175
              165
His Leu Ser Val Val Thr Leu Phe Tyr Gly Thr Ile Ile Gly Leu Tyr
                                                  190
                              185
Leu Cys Pro Ser Gly Asn Asn Ser Thr Val Asn Glu Ile Ser Met Ala
                          200
     . 195
Met Met Tyr Thr Val Val Thr Pro
   210
<210> 2477
<211> 236
<212> PRT
<213> Unknown (3810822-dir-0-8 conceptual translation of range 1-708)
<400>2477
Pro Met Tyr Leu Phe Leu Gly Asn Leu Ser Phe Ser Asp Leu Cys Phe
                                   10
Ser Ser Val Thr Met Pro Lys Leu Leu Gln Asn Met Gln Ser Gln Asp
           20
                              25
Thr Ser Ile Thr Tyr Val Gly Cys Leu Thr Gln Ser Val Leu Phe Leu
                           40
```

```
Ile Phe Phe Gly Gly Leu Glu Ile Phe Leu Leu Val Val Met Ala Tyr
                        55
                                            60
Asp Arg Tyr Val Ala Ile Cys Leu Pro Leu His Tyr Ser Ser Ile Met
                    70
                                        75
Ser Leu Lys Phe Cys Val Cys Ala Val Leu Ile Ser Trp Ile Asn Ser
                85
                                    90
Pro Trp Tyr Ser Lys Leu His Thr Leu Leu Leu Ala Arg Leu Ser Phe
                                105
Cys Glu Asp Asn Ile Ile Cys His Phe Phe Cys Asp Met Ser Ala Leu
                            120
                                                125
Leu Lys Leu Ala Cys Ser Asp Ile Tyr Ile Asn Glu Leu Val Ile Phe
                        135
                                            140
Ile Leu Gly Gly Pro Leu Val Val Ile Pro Phe Leu Leu Ile Val Val
                    150
                                        155
Ser Tyr Val Gln Ile Ile Phe Ser Ile Leu Lys Ala Ser Ser Thr Arg
                165
                                    170
                                                         175
Gly Ile Tyr Lys Val Phe Ser Thr Cys Gly Thr Tyr Leu Thr Val Val
                                185
                                                    190
Ser Leu Phe Tyr Gly Thr Val Ile Gly Leu Tyr Phe Cys Pro Ser Glu
       195
                            200
                                                205
Lys Leu Tyr Ser Lys Glu Ala Ser Ile Thr Met Met Tyr Thr Val Val
                       215
                                            220
Thr Pro Met His Pro Phe Ile Tyr Thr Leu Arg Asn
                    230
<210> 2478
<211> 216
<212> PRT
<213> Unknown (OST044-dir-0-8 conceptual translation of range 2-649)
<400>2478
Leu Ala Asp Ile Ser Phe Ser Ser Val Thr Val Pro Lys Met Leu Met
1
                                    10
Asp Met Arg Thr Lys Tyr Lys Ser Ile Leu Tyr Glu Glu Cys Ile Ser
                                25
                                                    30
Gln Met Tyr Phe Phe Ile Phe Phe Thr Asp Leu Asp Ser Phe Leu Ile
                            40
Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu His
                        55
                                            60
Tyr Thr Val Ile Met Arg Glu Glu Leu Cys Val Phe Leu Val Ala Val
                    70
                                        75
Ser Trp Ile Leu Ser Cys Ala Ser Ser Leu Ser His Thr Leu Leu Leu
Thr Arg Leu Ser Phe Cys Ala Ala Asn Thr Ile Pro His Val Phe Cys
            100
                                105
                                                    110
Asp Leu Ala Ala Leu Leu Lys Leu Ser Cys Ser Asp Ile Phe Leu Asn
       115
                            120
                                                125
Glu Leu Val Met Phe Thr Val Gly Val Val Val Ile Thr Leu Pro Phe
                        135
                                            140
Met Cys Ile Leu Val Ser Tyr Gly Tyr Ile Gly Ala Thr Ile Leu Arg
                   150
                                        155
Val Pro Ser Thr Lys Gly Ile His Lys Ala Leu Ser Thr Cys Gly Ser
               165
                                    170
His Leu Ser Val Val Ser Leu Tyr Tyr Gly Ser Ile Phe Gly Gln Tyr
            180
                                185
                                                    190
Leu Phe Pro Thr Val Ser Ser Ser Ile Asp Lys Asp Val Ile Val Ala
                            200
Leu Met Tyr Thr Val Val Thr Pro
```

<210> 2479

```
<211> 216
 <212> PRT
 <213> Unknown (hg152-dir-0-8 conceptual translation of range 1-648)
<400>2479
Leu Thr Asp Ile Ser Phe Ser Ser Val Thr Val Pro Lys Met Leu Met
                                     10
Asp Met Arg Thr Lys Tyr Lys Ser Ile Leu Tyr Glu Glu Cys Ile Ser
            20
                                 25
Gln Met Tyr Phe Phe Ile Phe Phe Thr Asp Leu Asp Ser Phe Leu Ile
Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu His
                        55
Tyr Thr Val Val Met Arg Glu Glu Leu Cys Val Phe Leu Val Ala Val
                                         75
Ser Trp Ile Leu Ser Cys Asp Ser Ser Leu Ser His Thr Leu Leu Leu
                                     90
Thr Arg Leu Ser Phe Cys Ala Ala Asn Thr Ile Pro His Val Phe Cys
                                105
Asp Leu Ala Ala Leu Leu Lys Leu Ser Cys Ser Asp Ile Phe Leu Asn
                            120
Glu Leu Val Met Phe Thr Val Gly Val Val Ile Thr Leu Pro Phe
                        135
                                            140
Met Cys Ile Leu Val Ser Tyr Gly Tyr Ile Gly Ala Thr Ile Leu Arg
                    150
                                        155
Val Pro Ser Thr Lys Gly Ile His Lys Ala Leu Ser Thr Cys Gly Ser
                165
                                    170
                                                         175
His Leu Ser Val Val Ser Leu Tyr Tyr Gly Ser Ile Phe Gly Gln Tyr
                                185
                                                     190
Leu Phe Pro Thr Val Ser Ser Ser Ile Asp Lys Asp Val Ile Val Ala
                            200
Leu Met Tyr Thr Val Val Thr Pro
<210> 2480
<211> 112
<212> PRT
<213> Unknown (1142973-dir-0-5 conceptual translation of range 1-336)
<400>2480
His Pro Leu His Tyr Ile Thr Ile Met Ser Gln Ser Arg Cys Ala Met
Leu Val Ala Val Ser Trp Val Ile Ala Ser Ala Cys Ala Leu Leu His
            20
Ser Leu Leu Leu Asp Gln Leu Ser Phe Cys Ala Asp His Thr Val Pro
                            40
His Phe Phe Cys Asp Leu Gly Ala Leu Leu Lys Leu Ser Cys Ser Asp
                        55
Thr Ser Leu Asn Gln Leu Val Ile Phe Thr Ala Gly Leu Ala Ala Ile
Met Leu Pro Phe Leu Cys Ile Leu Ile Ser Tyr Gly Arg Ile Gly Phe
               85
                                    90
Thr Ile Leu Gln Val Pro Thr Thr Lys Gly Ile Cys Lys Ala Leu Ser
                                105
<210> 2481
<211> 216
<213> Unknown (hg32-dir-0-8 conceptual translation of range 1-648)
<400>2481
```

```
Leu Thr Asp Ile Ser Phe Ser Ser Val Thr Val Pro Lys Met Leu Met
                                    10
Asn Met Gln Thr Gln His Leu Ala Val Phe Tyr Lys Gly Cys Ile Ser
Gln Thr Tyr Phe Phe Ile Phe Phe Ala Asp Leu Asp Ser Phe Leu Ile
                            40
Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu His
Tyr Ala Thr Ile Met Thr Gln Ser Gln Cys Val Met Leu Val Ala Gly
                    70
Ser Trp Val Ile Ala Cys Ala Cys Ala Leu Leu Asp Thr Leu Leu Leu
                                    90
Ala Gln Leu Ser Phe Cys Ala Asp His Ile Ile Pro His Tyr Phe Cys
                               105
Asp Leu Gly Ala Leu Leu Lys Leu Ser Cys Ser Asp Thr Ser Leu Asn
                           120
                                                125
Gln Leu Ala Ile Phe Thr Ala Ala Leu Thr Ala Ile Met Leu Pro Phe
                       135
                                            140
Leu Cys Ile Leu Val Ser Tyr Gly His Ile Gly Val Thr Ile Leu Gln
                   150
                                        155
Ile Pro Ser Thr Lys Gly Ile Cys Lys Ala Leu Ser Thr Cys Gly Ser
                                   170
                165
His Leu Ser Val Val Thr Ile Tyr Tyr Arg Thr Ile Ile Gly Leu Tyr
            180
                                185
Phe Leu Pro Pro Ser Ser Asn Thr Asn Asp Lys Asn Ile Ile Ala Ser
Val Ile Tyr Thr Ala Val Thr Pro
<210> 2482
<211> 223
<212> PRT
<213> Unknown (3983375-dir-0-8 conceptual translation of range 1-669)
Ser His Leu Ala Phe Thr Asp Ile Ser Phe Ser Ser Val Thr Ala Pro
Lys Met Leu Met Asn Met Leu Thr His Ser Gln Ser Ile Ser His Ala
                                25
Gly Cys Val Ser Gln Ile Tyr Phe Phe Leu Leu Phe Gly Cys Ile Asp
                           40
                                                45
Asn Phe Leu Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys
                        55
                                            60
His Pro Leu His Tyr Thr Thr Ile Met Ser Gln Ser Leu Cys Val Leu
                    70
                                        75
Leu Val Met Val Ser Trp Ala Phe Ser Ser Ser Asn Gly Leu Val His
                                    90
                85
Thr Leu Leu Phe Ala Arg Leu Ser Leu Phe Arg Asp Asn Thr Val His
                                105
His Phe Phe Cys Asp Leu Ser Ala Leu Leu Lys Leu Ser Ser Asp
                            120
                                                125
Thr Thr Ile Asn Glu Leu Val Ile Leu Thr Leu Ala Val Val Ile
                        135
                                            140
Thr Val Pro Phe Ile Cys Ile Leu Val Ser Tyr Gly His Met Gly Ala
                    150
                                        155
Thr Ile Leu Arg Thr Pro Ser Ile Lys Gly Ile Cys Lys Ala Leu Ser
               165
                                   170
Thr Cys Gly Ser His Leu Cys Val Val Ser Leu Tyr Tyr Gly Ala Ile
           180
                               185
Ile Gly Leu Tyr Phe Phe Pro Ser Ser Asn Asn Thr Asn Asp Lys Asp
                            200
```

```
Val Ile Val Ala Val Leu Tyr Thr Val Val Thr Pro Met Leu Asn
                        215
<210> 2483
<211> 176
<212> PRT
<213> Unknown (3273636-dir-0-7 conceptual translation of range 4-531)
Gln Ala Leu Ala Tyr Asp Arg Phe Leu Ala Ile Cys Gln Pro Leu His
Tyr Arg Thr Ile Met Arg Asp Gly Phe Cys Val Leu Leu Val Val Gly
            20
                                25
Ser Trp Phe Phe Ser Cys Val His Ala Leu Leu His Thr Leu Leu Leu
                            40
Ser Arg Leu Ser Phe Cys Ala Asp Asn Ala Ile Pro His Phe Phe Cys
                       55
Asp Phe Thr Ala Val Leu Lys Met Thr Cys Ser Asp Thr Ser Ile Asn
Glu Leu Val Ile Phe Ile Glu Gly Gly Leu Leu Thr Ser Leu Pro Leu
                                    90
Ser Ala Ile Leu Gly Ser Tyr Val Arg Ile Gly Ala Ser Ile Leu Arg
            100
                               105
                                                   110
Val Pro Ser Met Lys Arg Ile Cys Lys Ala Leu Ser Thr Cys Gly Ser
        115
                           120
                                                125
His Leu Phe Val Val Phe Leu Tyr Tyr Gly Thr Ile Ala Met Thr Tyr
                       135
                                            140
Phe Phe Pro Ser Ser Tyr Asn Ser Lys Val Lys Gly Ile Ile Ala Ser
                                        155
                    150
Val Ile Tyr Thr Val Val Ala Pro Met Leu Asn Pro Phe Ile Cys Ser
                                    170
                165
<210> 2484
<211> 222
<212> PRT
<213> Unknown (4877296-dir-0-8 conceptual translation of range 2-667)
<400>2484
Ser His Leu Ala Leu Thr Asp Ile Ser Phe Ser Ser Val Thr Leu Pro
                                    10
Lys Met Leu Met Asn Met Gln Thr Arg Cys Gln Ala Ile Thr Tyr Ala
Gly Cys Ile Ser Gln Val Tyr Cys Phe Ile Phe Phe Gly Cys Leu Asp
Ser Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Val Cys
                       55
His Pro Leu His Tyr Thr Ala Ile Met Arg Asp Glu Leu Cys Val Ile
                   70
Leu Val Ala Gly Arg Trp Leu Ala Ala Cys Ala Gln Ala Leu Leu His
                                    90
Thr Leu Leu Val Asp Gln Leu Thr Leu Cys Ala Gly Thr Val Ile Pro
                               105
                                                    110
His Phe Phe Cys Asp Leu Ala Val Val Leu Lys Ser Ser Cys Ser Asp
                                                125
                           120
Thr Ser Leu Asn Glu Leu Leu Ile Leu Thr Glu Gly Gly Leu Ile Phe
                       135
                                            140
Thr Leu Pro Leu Gly Gly Ile Leu Gly Ser Tyr Ile Arg Met Ala Ala
                   150
                                        155
Ile Ile Leu Lys Val Pro Ser Phe Thr Arg Ile Phe Lys Ala Leu Ser
                                    170
Thr Cys Gly Ser His Leu Phe Val Val Phe Leu Tyr Tyr Gly Thr Ile
```

```
180
                                 1.85
 Ala Gly Val Tyr Tyr Phe Pro Ser Ser Gly Asn Ser Lys Val Lys Asp
                         200
                                                205
 Ile Val Ala Ser Leu Met Tyr Met Val Val Thr Pro Met Leu
                         215
 <210> 2485
 <211> 173
 <212> PRT
 <213> Unknown (3273660-dir-0-7 conceptual translation of range 1-519)
<400>2485
Gln Ala Leu Ala Tyr Asp Arg Tyr Val Ala Ile Cys Gln Leu Leu His
Tyr Ser Thr Ile Met Arg Gln Glu Leu Cys Val Ser Leu Val Ser Gly
Ser Trp Phe Leu Cys Cys Ile Tyr Ala Leu Leu His Thr Leu Leu Leu
                            40
Val Gln Leu Ser Phe Ser Val Asp Asn Thr Ile Pro His Ser Asn Leu
                        55
                                            60
Ile Ala Leu Leu Lys Leu Ser Cys Ser Asp Thr Ser Leu Asn Glu Leu
                    70
                                        75
Val Ile Phe Pro Val Arg Gly Thr Leu Leu Ile Leu Ser Leu Phe Ser
                85
                                    90
Ile Leu Gly Ser Tyr Ile His Ile Gly Pro Thr Leu Leu Ser Val Ser
            100
                                105
Ser Thr Arg Asp Ser Lys Val Cys Ser Thr Cys Gly Phe His His Phe
                            120
        115
Ser Val Ser Leu Tyr His Arg Lys Leu Ala Asn Val Ser Phe Phe Ser
                        135
Leu Ser Trp Asp Ser Asn Gly Lys Asp Val Thr Thr Ser Val Val Tyr
                   150
                                        155
Ala Val Val Thr Pro Met Val Asn Pro Phe Ile Cys Ser
<210> 2486
<211> 135
<212> PRT
<213> Unknown (3273658-dir-0-6 conceptual translation of range 1-405)
<400>2486
Ile Tyr Ala Leu Leu His Thr Leu Leu Leu Val Gln Leu Ser Phe Ser
          • •
                5
                                    10
Val Asp Asn Thr Ile Pro His Ser Asn Leu Ile Ala Leu Leu Lys Leu
                                25
Ser Cys Ser Asp Thr Ser Leu Asn Glu Leu Val Ile Phe Pro Val Arg
                            40
Gly Thr Leu Leu Ile Pro Ser Leu Leu Ser Ile Leu Gly Ser Tyr Ile
                        55
His Ile Gly Pro Thr Leu Leu Ser Val Ser Ser Thr Arg Asp Ser Lys
                    70
Val Cys Ser Thr Cys Gly Phe His His Phe Ser Val Ser Leu Tyr His
             · 85
                                    90
Arg Lys Arg Ala Asn Val Ser Phe Phe Ser Ser Trp Asp Ser Asn
                                105
Gly Lys Asp Val Thr Thr Ser Val Val Tyr Ala Val Val Thr Pro Met
                            120
Leu Asn Pro Phe Ile Cys Ser
                        135
<210> 2487
```

1510

```
<211> 176
<212> PRT
<213> Unknown (3273646-dir-0-7 conceptual translation of range 1-528)
<400>2487
Gln Ala Leu Ala Tyr Asp Arg Phe Leu Ala Val Cys His Pro Leu His
Tyr Ala Ile Phe Met Arg Glu Arg Leu Cys Ile Phe Leu Leu Ala Gly
                                25
Ser Trp Leu Leu Ser Gly Ala Ser Ala Leu Thr His Thr Leu Leu Val
                            40
Val Gln Leu Ser Phe Cys Ala Asp Asn Ile Ile Leu His Phe Phe Cys
                        55
Asp Leu Val Pro Leu Leu Lys Leu Ser Cys Ser Asp Thr Ser Leu Asn
                                       75
                    70
Glu Leu Val Ile Phe Thr Val Gly Ser Val Gly Leu Val Phe Pro Leu
               85
                                   90
Ser Gly Ile Leu Val Ser Tyr Gly Arg Ile Gly Leu Ser Ile Leu Arg
                                                    110
                               105
           100
Val Pro Ser Thr Lys Gly Val Cys Lys Ala Leu Ser Thr Cys Gly Ser
                            120
                                                125
His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Met Ala Val Tyr
                        135
                                            140
Phe Ser Ser Ser Gly Gln Ser His Glu Lys Asp Ile Ile Ala Ser
                                       155
                   150
Met Met Tyr Thr Val Val Thr Pro Met Val Asn Pro Val Ile Cys Ser
                                    170
<210> 2488
<211> 313
<212> PRT
<213> Unknown (205815-dir-0-11 conceptual translation of range 1-939)
Met Ser Ser Thr Asn Gln Ser Ser Val Thr Glu Phe Leu Leu Gly
                                    10
Leu Ser Arg Gln Pro Gln Gln Gln Leu Leu Phe Leu Leu Phe Leu
                               25
           20
Ile Met Tyr Leu Ala Thr Val Leu Gly Asn Leu Leu Ile Ile Leu Ala
                           40
                                               45
Ile Gly Thr Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                                            60
                       55
Asn Leu Ser Phe Val Asp Val Cys Phe Ser Ser Thr Thr Val Pro Lys
                    70
Val Leu Ala Asn His Ile Leu Gly Ser Gln Ala Ile Ser Phe Ser Gly
                                    90
Cys Leu Thr Gln Leu Tyr Phe Leu Ala Val Phe Gly Asn Met Asp Asn
                               105
           100
Phe Leu Leu Ala Val Met Ser Tyr Asp Arg Phe Val Ala Ile Cys His
                            120
Pro Leu His Tyr Thr Thr Lys Met Thr Arg Gln Leu Cys Val Leu Leu
                       135
                                           140
Val Val Gly Ser Trp Val Val Ala Asn Met Asn Cys Leu Leu His Ile
                   150
                                       155
Leu Leu Met Ala Arg Leu Ser Phe Cys Ala Asp Asn Met Ile Pro His
               165
                                   170
Phe Phe Cys Asp Gly Thr Pro Leu Leu Lys Leu Ser Cys Ser Asp Thr
                                                    190
                               185
           180
His Leu Asn Glu Leu Met Ile Leu Thr Glu Gly Ala Val Val Met Val
                            200
                                               205
Thr Pro Phe Val Cys Ile Leu Ile Ser Tyr Ile His Ile Thr Cys Ala
```

```
220
                       215
Val Leu Arg Val Ser Ser Pro Arg Gly Gly Trp Lys Ser Phe Ser Thr
                  230
                                       235
Cys Gly Ser His Leu Ala Val Val Cys Leu Phe Tyr Gly Thr Val Ile
                                   250
               245
Ala Val Tyr Phe Asn Pro Ser Ser His Leu Ala Gly Arg Asp Met
                               265
           260
Ala Ala Ala Val Met Tyr Ala Val Val Thr Pro Met Leu Asn Pro Phe
                          280
Ile Tyr Ser Leu Arg Asn Ser Asp Met Lys Ala Ala Leu Arg Lys Val
                      295
Leu Ala Met Arg Phe Pro Ser Lys Gln
                   310
<210> 2489
<211> 216
<212> PRT
<213> Unknown (hg91-dir-0-8 conceptual translation of range 1-648)
<400>2489
Phe Val Asp Val Cys Phe Ser Ser Thr Thr Val Pro Lys Val Leu Ala
                                   10
Asn His Ile Leu Gly Ser Gln Ala Ile Ser Phe Ser Gly Cys Leu Thr
                               25
Gln Leu Tyr Phe Leu Ala Val Cys Gly Asn Met Asp Asn Phe Leu Leu
                           40
Gly Val Met Ser Tyr Asp Arg Phe Val Ala Ile Cys His Pro Leu His
                       55
Tyr Thr Thr Lys Met Thr Arg Gln Leu Cys Val Leu Leu Val Val Gly
                   70
                                       75
Ser Trp Val Val Ala Asn Met Asn Cys Leu Leu His Ile Leu Leu Met
                                   90
Ala Arg Leu Ser Phe Cys Ala Asp Asn Met Ile Pro His Phe Phe Cys
           100
                               105
Asp Gly Thr Pro Leu Leu Lys Leu Ser Cys Ser Asp Thr His Leu Asn
                           120
Glu Leu Met Ile Leu Thr Glu Gly Ala Val Val Met Val Thr Pro Phe
                       135
Val Cys Ile Leu Ile Ser Tyr Ile His Ile Thr Cys Ala Val Leu Arg
                  150
                                       155
Val Ser Ser Pro Arg Gly Gly Trp Lys Ser Phe Ser Thr Cys Gly Ser
                                   170
               165
His Leu Ala Val Val Cys Leu Phe Tyr Gly Thr Val Ile Ala Val Tyr
                               185
                                                   190
           180
Phe Asn Pro Ser Ser Ser His Leu Ala Gly Arg Asp Met Ala Ala Ala
                           200
      195
Val Met Tyr Pro Val Val Thr Pro
<210> 2490
<211> 157
<213> Unknown (902718-dir-0-6 conceptual translation of range 2-472)
Ile Cys His Pro Leu Gln Tyr Thr Thr Lys Met Thr His Gln Leu Cys
                                   10
Ala Leu Leu Val Val Gly Ser Trp Val Val Ala Asn Leu Asn Cys Leu
          20
                               25
Leu His Ile Leu Leu Met Ala Pro Leu Ser Phe Cys Ala Asp Asn Ile
```

40

```
Ile Pro His Phe Phe Cys Asp Ala Thr Pro Leu Leu Lys Leu Ser Cys
                        55
 Ser Asp Thr His Leu Asn Glu Leu Met Ile Leu Thr Glu Gly Ala Val
                     70
                                         75
 Ile Ile Val Thr Pro Phe Val Cys Ile Leu Ile Ser Tyr Ile His Val
                85
                                     90
 Thr Cys Ala Val Leu Arg Val Ser Ser Pro Arg Gly Gly Trp Lys Ala
            100
                                 105
                                                     110
 Phe Ser Thr Arg Gly Ser His Pro Ala Val Val Cys Leu Phe Tyr Gly
                             120
                                                 125
 Thr Ile Ile Ala Glu Tyr Phe Ser Ser Ser Pro His Ser Ala Gly
                        135
 Arg Asp Met Ala Gly Ala Met Met Tyr Thr Val Val Thr
                    150
 <210> 2491
 <211> 221
 <212> PRT
 <213> Unknown (3769625-dir-0-8 conceptual translation of range 1-663)
<400>2491
Ser Asn Leu Ser Phe Val Asp Val Cys Phe Ser Ser Thr Thr Ala Pro
 1
                                     10
Ser Val Leu Ala Asn His Ile Leu Gly Ser Gln Lys Ile Ser Phe Ser
            20
                                25
Gly Cys Leu Thr Gln Leu Tyr Phe Leu Cys Ile Phe Gly Asp Met Asp
                            40
                                                 45
Asn Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys
                        55
His Pro Leu Arg Tyr Thr Thr Lys Met Thr His Gln Val Cys Ala Leu
                    70
                                        75
Leu Val Met Gly Ser Trp Val Val Ala Asn Met Asn Cys Leu Leu His
                                    90
Ile Leu Leu Met Ala Arg Leu Ser Phe Cys Ala Asp Ser Ile Ile Pro
                                105
                                                    110
His Phe Phe Cys Asp Val Thr Pro Leu Leu Lys Leu Ser Cys Ser Asp
                            120
Thr His Leu Asn Glu Leu Met Ile Leu Thr Glu Gly Ala Val Val Met
                        135
                                            140
Val Thr Pro Phe Val Cys Ile Leu Ile Ser Tyr Ile His Ile Thr Trp
                    150
                                        155
Ala Val Leu Arg Val Ser Ser Pro Arg Gly Gly Trp Lys Ala Phe Ser
                165
                                    170
                                                        175
Thr Cys Gly Ser His Leu Thr Val Val Cys Leu Leu Tyr Gly Thr Val
            180
                                185
                                                    190
Ile Thr Val Tyr Phe Asn Pro Ser Thr Ser Tyr Ser Ala Gly Arg Asp
                           200
Thr Ala Ala Ala Val Met Tyr Thr Val Val Thr Pro Met
                        215
<210> 2492
<211> 221
<212> PRT
<213> Unknown (3769644-dir-0-8 conceptual translation of range 1-663)
<400>2492
Thr Asn Leu Ser Phe Val Asp Val Cys Phe Ser Ser Ser Thr Val Pro
                                    10
Lys Val Leu Ala Asn His Ile Leu Gly Ser Gln Glu Ile Ser Phe Ser
                                25
Gly Cys Leu Thr Gln Met Tyr Phe Leu Ser Val Phe Ala Asp Met Asp
```

```
40
Asn Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys
                        55
His Pro Leu His Tyr Thr Glu Lys Met Thr Arg Gln Leu Cys Ala Leu
                                        75
                    70
Leu Val Val Glu Ser Trp Val Ala Ala Asn Leu Asn Ala Leu Leu His
                                    90
Thr Leu Leu Met Ala Arg Leu Ser Phe Cys Gly Asp Asn Ile Ile Pro
                                105
            100
His Phe Phe Cys Asp Ala Thr Pro Leu Leu Lys Leu Ser Cys Ser Asp
                            120
Thr His Leu Asn Glu Leu Met Ile Leu Thr Val Ala Gly Leu Ile Leu
                                            140
                        135
Leu Ala Pro Phe Val Cys Ile Leu Met Ser Tyr Ile Leu Ile Ala Cys
                    150
                                        155
Ala Val Val Arg Val Ser Ser Thr Gly Gly Arg Trp Lys Ala Phe Ser
                                    170
                165
Thr Cys Gly Ser His Leu Thr Val Val Cys Leu Phe Tyr Gly Thr Ile
                                185
                                                    190
            180
Ile Ala Val Tyr Phe Asn Pro Ala Ser Ser His Ser Ala Gly Arg Asp
                           200
Met Ala Ser Ala Met Met Tyr Thr Val Val Thr Pro Met
                        215
<210> 2493
<211> 327
<212> PRT
<213> Unknown (2808536-dir-0-11 conceptual translation of range 16-996)
<220>
<221> VARIANT
<222> (1) ... (327)
<223> Xaa = Any Amino Acid
<400>2493
Val Cys Phe Xaa Ile His Cys Leu Leu Cys Ser Trp Val Gln Thr Tyr
                                    10
Glu Arg Asp Lys Pro Val Ser Val Ser Glu Phe Leu Leu Gly Leu
                                                    30
                                25
Ser Arg Gln Pro Gln Gln Gln His Leu Leu Phe Val Phe Phe Leu Ser
                            40
Met Tyr Leu Ala Thr Val Leu Gly Asn Leu Leu Ile Ile Leu Ala Ile
                        55
    50
Ser Ile Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser Asn
                    70
                                        75
Met Ser Phe Val Asp Asn Cys Phe Ser Thr Thr Val Pro Lys Met Leu
                                    90
Ala Asn His Ile Leu Arg Thr Gln Thr Ile Ser Phe Ser Gly Cys Leu
                                105
Met Gln Met Tyr Phe Ile Ser Glu Leu Ala Asp Met Asp Asn Phe Leu
                                                125
                            120
Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala Val Cys Arg Pro Leu
                                            140
                        135
His Tyr Thr Ala Lys Met Ile His Gln Leu Cys Ala Leu Leu Val Thr
                                        155
                    150
Gly Ser Trp Val Val Ala Asn Ser Asn Ala Leu Leu His Thr Leu Leu
                                    170
                165
Met Ala Arg Leu Ser Phe Cys Ala Asp Asn Thr Ile Pro His Ile Phe
                                185
                                                    190
            180
Cys Asp Val Thr Pro Leu Leu Lys Leu Ser Cys Ser Asp Thr His Leu
                            200
        195
```

```
Ser Glu Val Met Ile Leu Thr Glu Ala Ala Leu Val Thr Ile Thr Pro
                                            220
                       215
Phe Leu Cys Leu Leu Ala Ser Tyr Met His Ile Thr Cys Val Val Leu
                                        235
                    230
Arg Val Pro Ser Thr Lys Gly Arg Trp Lys Ala Phe Ser Thr Cys Gly
                                    250
                245
Ser His Leu Ala Val Val Leu Phe Tyr Gly Thr Ile Met Ser Pro
                                265
Tyr Phe Arg Thr Ser Ser Ser His Ser Ala Gln Arg Asp Ile Ala Ala
                            280
                                                285
Ala Val Arg Phe Thr Val Val Thr Pro Val Met Asn Pro Leu Ile Tyr
                                           300
                        295
Ser Leu Arg Asn Lys Asp Ile Lys Gly Ala Leu Val Lys Val Val Ala
                                       315
                   310
Val Lys Phe Phe Ser Val Gln
                325
<210> 2494
<211> 312
<212> PRT
<213> Unknown (2370144-dir-0-11 conceptual translation of range 1-936)
<400>2494
Met Ser Gly Thr Asn Gln Ser Ser Val Ser Glu Phe Leu Leu Gly
                                    10
1
Leu Ser Arg Gln Pro Gln Gln Gln His Leu Leu Phe Val Phe Leu
            20
                                25
Ser Met Tyr Leu Ala Thr Val Leu Gly Asn Leu Leu Ile Ile Leu Ser
        35
                            40
                                                45
Val Ser Ile Asp Ser Cys Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                        55
                                            60
Asn Leu Ser Phe Val Asp Ile Cys Phe Ser Phe Thr Thr Val Pro Lys
                                        75
                    70
Met Leu Ala Asn His Ile Leu Glu Thr Gln Thr Ile Ser Phe Cys Gly
               85
                                    90
Cys Leu Thr Gln Met Tyr Phe Val Phe Met Phe Val Asp Met Asp Asn
           100
                               105
                                                    110
Phe Leu Leu Ala Val Met Ala Tyr Asp His Phe Val Ala Val Cys His
                            120
       115
Pro Leu His Tyr Thr Ala Lys Met Thr His Gln Leu Cys Ala Leu Leu
                                            140
                        135
Val Ala Gly Leu Trp Val Val Ala Asn Leu Asn Val Leu Leu His Thr
                   150
                                        155
Leu Leu Met Ala Pro Leu Ser Phe Cys Ala Asp Asn Ala Ile Thr His
                                   170
               165
Phe Phe Cys Asp Val Thr Pro Leu Leu Lys Leu Ser Cys Ser Asn Thr
           180
                               185
His Leu Asn Glu Val Ile Ile Leu Ser Glu Gly Ala Leu Val Met Ile
                           200
                                                205
Thr Pro Phe Leu Cys Ile Leu Ala Ser Tyr Met His Ile Thr Cys Thr
                        215
                                           220
Val Leu Lys Val Pro Ser Thr Lys Gly Arg Trp Lys Ala Phe Ser Thr
                                        235
                   230
Cys Gly Ser His Leu Ala Val Val Leu Leu Phe Tyr Ser Thr Ile Ile
               245
                                    250
Ala Val Tyr Phe Asn Pro Leu Ser Ser His Ser Ala Glu Lys Asp Thr
                                265
Met Ala Thr Val Leu Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                            280
Ile Tyr Ser Leu Arg Asn Arg Tyr Leu Lys Gly Ala Leu Lys Lys Val
```

```
Ile Gly Arg Val Val Phe Ser Val
 <210> 2495
 <211> 216
 <212> PRT
 <213> Unknown (2921659-dir-0-8 conceptual translation of range 2-649)
 <400>2495
 Phe Val Asp Ile Cys Phe Ser Phe Thr Thr Val Pro Lys Met Leu Ala
 1
                                    10
Asn His Ile Leu Glu Thr Gln Thr Ile Ser Phe Cys Gly Cys Leu Thr
                                25
Gln Met Tyr Phe Val Phe Met Phe Val Asp Met Asp Asn Phe Leu Leu
                            40
Ala Val Met Ala Tyr Asp His Phe Val Ala Val Cys His Pro Leu His
                        55
Tyr Thr Ala Lys Val Thr His Gln Leu Cys Ala Leu Leu Val Ala Gly
                                        75
Leu Trp Val Val Ala Asn Leu Asn Val Leu Leu His Thr Leu Leu Met
Ala Pro Leu Ser Phe Cys Ala Asp Asn Ala Ile Thr His Phe Phe Cys
            100
                                105
Asp Val Thr Pro Leu Leu Lys Leu Ser Cys Ser Asp Thr His Leu Asn
                            120
Glu Val Ile Ile Leu Ser Glu Gly Ala Leu Val Met Ile Thr Pro Phe
                        135
                                            140
Leu Cys Ile Leu Ala Ser Tyr Met His Ile Thr Cys Thr Val Leu Lys
                    150
                                        155
Val Pro Ser Thr Lys Gly Arg Trp Lys Ala Phe Ser Thr Cys Gly Ser
                165
                                    170
His Leu Ala Val Val Leu Leu Phe Tyr Ser Thr Ile Ile Ala Val Tyr
           180
                               185
Phe Asn Pro Leu Ser Ser His Ser Ala Glu Lys Asp Thr Met Ala Thr
       195
                           200
Val Leu Tyr Thr Val Val Thr Pro
    210
<210> 2496
<211> 216
<212> PRT
<213> Unknown (2921657-dir-0-8 conceptual translation of range 2-649)
<400>2496
Phe Val Asp Ile Cys Phe Ser Ser Thr Thr Val Pro Lys Met Leu Ala
                                    10
Asn His Ile Leu Glu Thr Gln Thr Ile Ser Phe Cys Gly Cys Leu Thr
            20
                                25
Gln Met Tyr Phe Val Phe Met Phe Val Asp Met Asp Tyr Phe Leu Leu
                            40
Ala Val Met Ala Tyr Asp His Phe Val Ala Val Cys His Pro Leu His
                        55
                                            60
Tyr Thr Ala Lys Met Thr His Gln Leu Cys Ala Leu Leu Val Ala Gly
                    70
                                        75
Leu Trp Val Val Ala Asn Leu Asn Val Leu Leu His Thr Leu Leu Met
                                    90
Ala Pro Leu Ser Phe Cys Ala Asp Asn Ala Ile Thr His Phe Phe Cys
                               105
Asp Val Thr Pro Leu Leu Glu Leu Ser Cys Ser Asp Thr His Leu Asn
                            120
Glu Val Ile Ile Leu Ser Glu Gly Ala Leu Val Met Ile Thr Pro Phe
```

```
135
   130
Leu Cys Ile Leu Ala Ser Tyr Met His Ile Thr Cys Thr Val Leu Lys
                          155
                 150
Val Pro Ser Thr Lys Gly Arg Trp Lys Ala Phe Ser Thr Cys Gly Ser
              165
                      170
His Leu Ala Val Val Leu Leu Phe Tyr Ser Thr Ile Ile Ala Val Tyr
               185
          180
Phe Asn Pro Leu Ser Ser His Ser Ala Glu Lys Asp Thr Met Ala Thr
    195
                       200
Val Leu Tyr Thr Val Val Thr Pro
<210> 2497
<211> 216
<212> PRT
<213> Unknown (2921653-dir-0-8 conceptual translation of range 2-649)
<400>2497
Phe Val Asp Ile Cys Phe Ser Ser Thr Thr Val Pro Lys Met Leu Ala
                                 10
Asn His Ile Leu Glu Thr Gln Thr Ile Ser Leu Cys Gly Cys Leu Thr
                             25
                                             30
Gln Met Tyr Phe Val Phe Met Phe Val Asp Met Asp Asn Phe Leu Leu
                                         45
              40
 35
Ala Val Met Ala Tyr Asp His Phe Val Ala Val Cys His Pro Leu His
                     55
Tyr Thr Ala Lys Met Thr His Gln Leu Cys Ala Leu Leu Val Ala Gly
                                    75
65
                  70
Leu Trp Val Val Ala Asn Leu Asn Val Leu Leu His Thr Leu Leu Met
                                 90
              85
Ala Pro Leu Ser Phe Cys Ala Asp Asn Ala Ile Thr His Phe Phe Cys
                             105
           100
Asp Val Thr Pro Leu Leu Lys Leu Ser Cys Ser Asp Thr His Leu Asn
                                            125
                         120
Glu Val Ile Ile Leu Ser Glu Gly Ala Leu Val Met Ile Thr Pro Phe
                                         140
                     135
Leu Cys Ile Leu Ala Ser Tyr Met His Ile Thr Cys Thr Val Leu Lys
                                     155
                  150
Val Pro Ser Thr Lys Gly Arg Trp Lys Ala Phe Ser Thr Cys Gly Ser
                       170
              165
His Leu Ala Val Val Leu Leu Phe Tyr Ser Thr Ile Ile Ala Val Tyr
          180 185
                                               190
Phe Asn Pro Leu Ser Ser His Ser Ala Glu Lys Asp Thr Met Pro Thr
                         200
Val Leu Tyr Thr Val Val Thr Pro
                      215
   210
<210> 2498
<211> 216
<212> PRT
<213> Unknown (2921655-dir-0-8 conceptual translation of range 2-649)
<400>2498
Phe Val Asp Ile Cys Phe Ser Phe Thr Thr Val Pro Lys Met Leu Ala
                                  10
Asn His Ile Leu Glu Thr Gln Thr Ile Ser Phe Cys Gly Cys Leu Thr
                                                 30
                             25
Gln Met Tyr Phe Val Phe Thr Phe Val Asp Met Asp Asn Phe Leu Leu
                                            45
                         40
Ala Val Met Ala Tyr Asp His Phe Val Ala Glu Cys His Pro Leu His
```

60

55

```
Tyr Thr Ala Lys Met Thr His Gln Leu Cys Ala Leu Leu Val Ala Gly
                    70
                                        75
Leu Trp Val Val Ala Asn Leu Asn Val Leu His Thr Leu Leu Met
                85
                                    90
Ala Pro Leu Ser Phe Cys Ala Asp Asn Ala Ile Thr His Phe Phe Cys
            100
                                105
                                                    110
Asp Val Thr Pro Leu Leu Lys Leu Ser Cys Ser Asp Thr His Leu Asn
                            120
                                                125
Glu Val Ile Ile Leu Ser Glu Gly Ala Leu Val Met Ile Thr Pro Phe
                        135
Leu Cys Ile Leu Ala Ser Tyr Met His Ile Thr Cys Thr Val Leu Lys
                    150
                                        155
Val Pro Ser Thr Lys Gly Arg Trp Lys Ala Phe Ser Thr Cys Gly Ser
               165
                                   170
                                                        175
His Leu Ala Val Val Leu Leu Phe Tyr Ser Thr Ile Ile Ala Val Tyr
           180
                               185
                                                   190
Phe Asn Pro Leu Ser Ser His Ser Ala Glu Lys Asp Thr Met Ala Thr
       195
                           200
Val Leu Tyr Thr Val Val Thr Pro
    210
<210> 2499
<211> 216
<212> PRT
<213> Unknown (2921651-dir-0-8 conceptual translation of range 2-649)
<400>2499
Phe Val Asp Ile Cys Phe Ser Phe Thr Thr Val Pro Lys Met Leu Ala
                5
                                    10
Asp His Ile Leu Glu Thr Gln Thr Ile Ser Phe Cys Gly Cys Leu Thr
            20
                                25
                                                    30
Gln Met Tyr Phe Val Phe Met Phe Val Asp Met Asp Asn Phe Leu Leu
                            40
Ala Val Met Ala Tyr Asp His Phe Val Ala Val Cys His Pro Leu His
   50
                        55
                                            60
Tyr Thr Ala Arg Met Thr His Gln Leu Cys Ala Leu Leu Val Ala Gly
                   70
                                       75
Leu Trp Val Val Ala Asn Leu Asn Val Leu Leu His Thr Leu Leu Met
                                    90
Ala Pro Leu Ser Phe Tyr Ala Asp Asn Ala Ile Thr His Phe Phe Cys
            100
                               105
                                                   110
Asp Val Thr Pro Leu Leu Lys Leu Ser Cys Ser Asp Thr His Leu Asn
                           120
                                               125
        115
Glu Val Ile Ile Leu Ser Glu Gly Ala Leu Val Met Ile Thr Pro Phe
                        135
                                            140
Leu Cys Ile Leu Ala Ser Tyr Met His Ile Thr Cys Thr Val Leu Lys
                   150
                                       155
Val Pro Ser Thr Lys Gly Arg Trp Lys Ala Phe Ser Thr Cys Gly Ser
                                                       175
               165
                                   170
His Leu Ala Val Val Leu Leu Phe Tyr Ser Thr Ile Ile Ala Val Tyr
           180
                               185
Phe Asn Pro Leu Ser Ser His Ser Ala Glu Lys Asp Thr Ile Ala Thr
                           200
Val Leu Tyr Thr Val Val Thr Pro
<210> 2500
<211> 216
<212> PRT
<213> Unknown (2921692-dir-0-8 conceptual translation of range 2-649)
```

```
<400>2500
 Phe Val Asp Ile Cys Phe Ser Cys Thr Thr Val Pro Lys Met Leu Ala
                                    10
 Asn His Ile Leu Glu Thr Gln Thr Ile Ser Phe Cys Gly Cys Leu Thr
           20
                                25
 Gln Met Tyr Phe Val Phe Met Phe Val Asp Thr Asp Asn Phe Leu Leu
                            40
 Ala Val Met Ala Tyr Asp His Phe Val Ala Val Cys His Pro Leu His
                       55
Tyr Thr Ala Lys Met Thr His Gln Leu Cys Ala Leu Leu Val Ala Gly
                   70
                                       75
Leu Trp Val Val Ala Asn Leu Asn Val Leu Leu His Thr Leu Leu Met
               85
                                   90
Ala Pro Leu Ser Phe Cys Ala Asp Asn Ala Ile Thr His Phe Phe Cys
            100
                     . 105
                                                   110
Asp Val Thr Pro Leu Leu Lys Leu Ser Cys Ser Asp Thr His Leu Asn
                           120
                                               125
Glu Val Ile Ile Leu Ser Glu Gly Ala Leu Val Met Ile Thr Pro Phe
                        135
                                            140
Leu Cys Asn Leu Ala Ser Tyr Met His Ile Thr Cys Thr Gly Leu Lys
                    150
                                        155
Gly Pro Ser Thr Lys Gly Arg Trp Lys Ala Phe Ser Thr Cys Gly Ser
               165
                                    170
                                                        175
His Leu Ala Val Gly Leu Leu Phe Tyr Ser Thr Ile Thr Ala Val Tyr
                               185
                                                   190
Phe Asn Pro Leu Ser Ser His Ser Ala Ala Lys Asp Thr Met Ala Thr
                           200
Val Leu Tyr Thr Val Val Thr Pro
<210> 2501
<211> 224
<212> PRT
<213> Unknown (4877342-dir-0-8 conceptual translation of range 2-673)
<220>
<221> VARIANT
<222> (1)...(224)
<223> Xaa = Any Amino Acid
<400>2501
Cys Asn Leu Ser Phe Gly Asp Ile Cys Phe Ser Ser Thr Thr Val Pro
        5
                                  10
Lys Met Leu Ala Asn His Ile Leu Arg Lys Gln Thr Ile Pro Phe Ser
        20
                               25
Arg Cys Leu Ala Gln Met Tyr Phe Val Phe Thr Phe Met Asp Met Asp
                           40
                                               45
Asn Phe Leu Leu Ala Met Met Ala Tyr Asp His Phe Val Ala Val Cys
His Pro Leu His Tyr Tyr Ala Lys Met Thr His Gln Leu Cys Ala Leu
                   70
                                       75
Leu Val Thr Gly Ser Trp Val Ile Ala Asn Leu Asp Met Leu Leu His
               85
                                   90
Thr Leu Leu Met Ala Xaa Leu Ser Phe Cys Ala Asp Asn Ala Ile Pro
           100
                               105
                                                   110
His Phe Phe Cys Asp Val Thr Thr Leu Leu Lys Leu Ser Cys Ser Asp
                           120
                                               125
Thr His Leu Ser Glu Val Met Ile Leu Thr Glu Ala Arg Pro Val Met
                      135
                                           140
Ser Thr Pro Phe Val Cys Ile Leu Val Ser Tyr Ile Leu Ile Asn Cys
                   150
                                       155
```

```
Ala Val Leu Arg Val Gln Ser Thr Lys Gly Arg Trp Lys Thr Phe Ser
                165
                                   170
Thr Cys Gly Ser His Leu Ala Met Val Phe Leu Phe Tyr Gly Thr Met
            180
                               185
                                                    190
Ile Phe Leu Tyr Phe Asn Pro Leu Ser Ser His Ser Ala Glu Ile Asp
                           200
                                                205
Ile Ala Ala Ala Met Arg Cys Leu Tyr Met Val Thr Pro Met Leu
                       215
<210> 2502
<211> 216
<212> PRT
<213> Unknown (p105-dir-0-8 conceptual translation of range 2-649)
Leu Val Asp Phe Cys Phe Thr Ser Ala Thr Val Pro Lys Met Leu Leu
                                    10
Asn Ile His Arg Gln Ile Gln Ser Ile Ser His Glu Gly Cys Leu Thr
Gln Ile Tyr Phe Cys Ile Leu Leu Ala Asn Met Asp Asn Phe Leu Leu
                           40
                                               45
Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Tyr Pro Leu Gln
                       55
                                           60
Tyr Thr Thr Ile Met Ser Leu Gln Leu Cys Cys Leu Met Leu Ala Gly
                   70
                                       75
Ser Trp Leu Ile Ala Asn Phe His Ser Leu Leu His Thr Leu Leu Met
                                   90
               85
Ala Arg Leu Asp Phe Cys Ala Lys Asn Val Met Pro Tyr Phe Phe Cys
                                105
           100
Asp Leu Val Pro Leu Leu Gln Leu Ser Cys Ser Asp Thr Arg Leu Asn
                            120
                                                125
Gln Leu Met Ile Leu Leu Val Gly Gly Leu Ile Val Leu Ile Pro Phe
                        135
                                            140
Leu Cys Ile Leu Ile Ser Tyr Thr His Ile Val Ser Val Val Leu Lys
                   150
                                        155
Val Pro Ser Ala Leu Gly Lys Gln Lys Ala Phe Ser Thr Cys Gly Ser
                                    170
               165
His Leu Thr Val Val Ile Leu Phe Tyr Gly Thr Ile Thr Gly Val Tyr
                               185
Leu Asn Pro Ser Ser Ser His Ser Ala Glu Lys Asp Ser Val Ala Ser
                           200
Val Met Tyr Met Val Val Thr Pro
<210> 2503
<211> 216
<212> PRT
<213> Unknown (p110-dir-0-8 conceptual translation of range 2-649)
<400>2503
Phe Val Asp Leu Cys Gln Ala Ser Thr Thr Met Pro Lys Met Leu Ile
                                    10
Asn Ile Leu Thr His Ser Lys Ala Ile Pro Tyr Ala Gly Cys Leu Ile
Gln Met Tyr Ser Phe His Leu Phe Gly Thr Met Asp Ser Phe Leu Leu
Ala Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys His Pro Leu Arg
                                           60
                        55
Tyr Ala Thr Ile Met Ser Pro Arg Leu Cys Ile Leu Leu Val Gly Gly
                                    · 75
               70
Pro Trp Gly Thr Thr Asn Leu Gln Ser Val Val His Thr Ser Leu Met
```

```
90
                85
Ala Lys Leu Thr Phe Cys Ala Asp Asn Lys Ile Pro His Phe Phe Cys
                               105
           100
Asp Leu Met Pro Leu Leu Lys Leu Ser Cys Ser Asp Thr His Ile Asn
                           120
                                                125
Glu Leu Val Val Leu Val Phe Gly Ile Phe Met Gly Ile Ser Pro Leu
                        135
                                            140
Val Cys Ile Leu Leu Ser Tyr Ile Cys Ile Phe Cys Ala Val Leu Gln
                   150
                                        155
Val Pro Ser Ala Glu Gly Lys Arg Lys Ala Phe Ser Thr Arg Gly Ser
                                   170
               165
His Leu Thr Val Val Leu Leu Phe Tyr Gly Thr Ile Phe Ala Val Tyr
           180
                              185
Leu Gln Pro Ser Gly Pro Thr Ser Pro Glu Lys Asp Lys Ala Ala Ala
                           200
Val Met Cys Ala Val Val Ile Pro
    210
                        215
<210> 2504
<211> 216
<212> PRT
<213> Unknown (p94-dir-0-8 conceptual translation of range 2-649)
<400>2504
Phe Val Asp Leu Cys Gln Ala Ser Thr Thr Met Pro Lys Met Leu Ile
                5
                                    10
Asn Ile Leu Thr His Ser Lys Ala Ile Pro Tyr Ala Gly Cys Leu Ile
                               25
Gln Met Tyr Ser Phe His Leu Phe Gly Thr Met Asp Ser Phe Leu Leu
                                                45
                           40
Ala Val Met Ala Tyr Asp Arg Phe Val Ala Ile Phe His Pro Leu Arg
                        55
Tyr Ala Thr Ile Met Ser Pro Arg Leu Cys Ile Leu Leu Val Gly Gly
                                        75
                    70
Pro Trp Gly Thr Thr Asn Leu Gln Ser Val Val His Thr Ser Leu Met
                                   90
                85
Ala Lys Leu Thr Phe Cys Ala Asp Asn Lys Ile Pro His Phe Phe Cys
                               105
           100
Asp Leu Met Pro Leu Leu Lys Leu Ser Cys Ser Asp Thr His Ile Asn
                           120
                                                125
Glu Leu Val Val Leu Val Phe Gly Ile Phe Met Gly Ile Ser Pro Leu
                                            140
                       135
Val Cys Ile Leu Leu Ser Tyr Ile Cys Ile Phe Cys Ala Val Leu Gln
                                        155
                    150
Val Pro Ser Ala Glu Gly Lys Arg Lys Ala Phe Ser Thr Cys Gly Ser
                                   170
                                                        175
His Leu Thr Val Val Leu Val Phe Tyr Gly Thr Ile Phe Ala Val Tyr
                               185
                                                   190
           180
Val Gln Pro Ser Gly Pro Thr Ser Pro Glu Lys Asp Lys Ala Ala Ala
       195
                           200
Val Met Cys Ala Val Val Ile Pro
   210
<210> 2505
<211> 169
<212> PRT
<213> Unknown (4877330-dir-0-7 conceptual translation of range 3-509)
<400>2505
Asn Leu Ser Leu Val Asp Val Phe Leu Ser Ser Thr Thr Val Pro Lys
                                   10
```

```
Met Leu Val Asn Leu Trp Thr Gln Pro Ser His Pro Ser Val Cys Leu
Ala Gln Met His Ala Phe His Leu Phe Gly Thr Ile Asp Ser Phe Leu
                                                45
Leu Ala Val Met Ala Ile Asp Arg Phe Met Ala Ile Val His Arg Leu
                                           60
Cys Tyr Leu Ala Ile Met Ser Pro Arg Val Trp Gly Leu Leu Val Gly
                   70
                                       75
Glu Pro Trp Gln Ile Thr Asn Leu Gln Ser Leu Val His Thr Cys Leu
                                   90
Met Ala Gln Leu Thr Phe Cys Ala Gly Ser Glu Ile Pro His Phe Phe
                               105
Cys Asp Leu Ile Pro Leu Pro Lys Leu Ser Ser Ser Asp Thr His Thr
                                                125
                           120
Asn Glu Pro Val Ile Phe Pro Phe Gly Ile Ile Leu Gly Ile Ser Ser
                       135
Leu Ala Cys Ile Leu Phe Ser Tyr Thr Ser Ile Phe Gln Ala Val Phe
                   150
                                        155
Lys Ile Leu Ser Ala Gln Val Lys Trp
<210> 2506
<211> 315
<212> PRT
<213> Unknown (3184261-dir-59-13 conceptual translation of range 6034-6978)
Met Glu Pro Glu Lys Gln Thr Glu Ile Ser Glu Phe Phe Leu Gln Gly
Leu Ser Glu Lys Pro Glu His Gln Thr Leu Leu Phe Thr Met Phe Leu
                                25
           20
Ser Thr Tyr Leu Val Thr Ile Ile Gly Asn Ala Leu Ile Ile Leu Ala
                                                45
                            40
Ile Ile Thr Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Phe
                        55
                                            60
Asn Leu Ser Leu Val Asp Thr Leu Leu Ser Ser Thr Thr Val Pro Lys
                                        75
                    70
Met Leu Ala Asn Ile Gln Ala Gln Ser Arg Ala Ile Pro Phe Val Gly
                                    90
                85
Cys Leu Thr Gln Met Tyr Ala Phe His Leu Phe Gly Thr Met Asp Ser
                                105
            100
Phe Leu Leu Ala Val Met Ala Ile Asp Arg Phe Val Ala Ile Val His
                            120
Pro Gln Arg Tyr Leu Val Leu Met Cys Ser Pro Val Cys Gly Leu Leu
                                            140
                        135
Leu Gly Ala Ser Trp Met Ile Thr Asn Leu Gln Ser Leu Ile His Thr
                    150
                                        155
Cys Leu Met Ala Gln Leu Thr Phe Cys Ala Gly Ser Glu Ile Ser His
                165
                                   170
Phe Phe Cys Asp Leu Met Pro Leu Leu Lys Leu Ser Gly Ser Asp Thr
                               185
            180
His Thr Asn Glu Leu Val Ile Phe Ala Phe Gly Ile Val Val Gly Thr
                            200
        195
Ser Pro Phe Ser Cys Ile Leu Leu Ser Tyr Ile Arg Ile Phe Trp Thr
                       215
Val Phe Lys Ile Pro Ser Thr Arg Gly Lys Trp Lys Ala Phe Ser Thr
                                       235
                    230
Cys Gly Leu His Leu Thr Val Val Ser Leu Ser Tyr Gly Thr Ile Phe
                                   250
               245
Ala Val Tyr Leu Gln Pro Thr Ser Pro Ser Ser Ser Gln Lys Asp Lys
```

265

```
Ala Ala Ala Leu Met Cys Gly Val Phe Ile Pro Met Leu Asn Pro Phe
                           280
                                                285
Ile Tyr Ser Ile Arg Asn Lys Asp Met Lys Ala Ala Leu Gly Lys Leu
                       295
Ile Gly Lys Val Ala Val Pro Cys Pro Arg Pro
                   310
<210> 2507
<211> 216
<212> PRT
<213> Unknown (p97-dir-0-8 conceptual translation of range 2-649)
<400>2507
Leu Val Asp Ile Cys Phe Thr Ser Thr Thr Ile Pro Lys Met Leu Ala
Asn His Val Ser Gly Asn Lys Ala Ile Pro Tyr Ala Gly Cys Arg Thr
                                25
                                                    30
Gln Val Phe Phe Phe Ile Trp Phe Pro Gly Val Asp Ser Ile Leu Leu
                            40
Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Ala Pro Leu His
                                            60
                        55
Tyr Ser Met Ile Met Thr Pro Lys Val Cys Ala Phe Leu Ile Val Val
                    70
                                        75
Ser Trp Phe Gly Ala Tyr Ala Ile Ala Leu Ile His Thr Val Leu Leu
                                    90
                85
Thr His Leu Ser Phe Cys Gly His Ser Glu Ile Pro His Phe Phe Cys
                                                    110
            100
                                105
Asp Leu Ser Pro Leu Leu Lys Leu Ala Cys Ser Asp Thr Phe Ile Asn
                                                125
                           120
Asn Leu Met Val Asn Thr Val Gly Ala Leu Thr Ile Ile Ile Pro Phe
                                            140
                       135
Ile Gly Ile Leu Ile Ser Tyr Thr Gln Ile Phe Met Thr Val Leu Arg
                   150
                                        155
Ile Pro Ser Thr Val Gly Lys Trp Lys Ala Phe Ser Thr Cys Ser Ser
                                   170
                165
His Ile Thr Val Val Ser Leu Phe Tyr Gly Thr Leu Ile Gly Val Tyr
                                                    190
                                185
            180
Phe Ser Pro Thr Thr His Thr Ala Gln Gln Asp Thr Ala Ala Ala
                            200
Ala Met Tyr Thr Val Val Thr Pro
<210> 2508
<211> 216
<212> PRT
<213> Unknown (p99-dir-0-8 conceptual translation of range 2-649)
<400>2508
Leu Val Asp Ile Cys Phe Thr Ser Thr Thr Val Pro Lys Met Leu Ala
                                    10
1
Asn His Val Ser Gly Asn Lys Met Ile Pro Tyr Pro Gly Cys Leu Thr
            20
                                25
Gln Val Phe Phe Phe Ile Trp Phe Ala Gly Ile Asp Ser Phe Leu Leu
                            40
Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Ala Pro Leu His
Tyr Ser Thr Val Met Thr Leu Arg Val Cys Val Leu Leu Leu Met Val
                                        75
                    70
Ser Trp Phe Ser Ala Phe Ile Asn Ala Leu Thr His Ala Ala Leu Leu
                                   90
Thr Pro Leu Ser Phe Cys Gly His Asn Glu Ile Pro His Phe Phe Cys
```

```
110
                               105
           100
Asp Leu Ser Pro Leu Leu Lys Leu Ala Cys Ser Asp Thr Phe Ile Asn
                          120
                                              125
Asp Leu Met Val Tyr Thr Val Gly Ala Leu Pro Ile Ile Thr Pro Phe
                                           140
                      135
Ile Gly Ile Leu Ile Ser Tyr Thr Arg Ile Phe Met Ala Val Leu Arg
                                       155
                   150
Val Pro Ser Ala Gly Gly Lys Trp Lys Ala Phe Ser Thr Cys Gly Ser
                                  170
               165
His Leu Ala Val Val Ser Leu Phe Tyr Gly Thr Leu Ile Gly Val Tyr
                                                   190
                       185
Phe Ser Pro Thr Ser Thr Arg Thr Ala Gln Glu Asp Thr Val Ala Ala
                          200
Val Met Tyr Thr Val Val Thr Pro
<210> 2509
<211> 216
<212> PRT
<213> Unknown (p96-dir-0-8 conceptual translation of range 2-649)
<400>2509
Leu Val Asp Leu Cys Phe Thr Ser Thr Thr Val Pro Lys Met Leu Asn
                                   10
Asn Tyr Ile Ser Gln Asn Arg Thr Ile Ser Tyr Ala Gly Cys Leu Thr
                               25
Gln Val Phe Phe Phe Leu Trp Phe Ala Gly Met Asp Ser Val Leu Leu
                           40
Thr Thr Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Ala Ser Leu His
                       55
Tyr Ser Thr Val Met Thr Pro Lys Ile Cys Ala Leu Leu Val Gly Val
                                       75
65
Ser Trp Phe Trp Ala Tyr Asn Asn Ala Leu Ile His Thr Val Leu Leu
                                   90
Thr Arg Leu Ser Phe Cys Gly His Asn Glu Ile Pro His Phe Phe Cys
                                                   110
                               105
Asp Leu Ser Pro Leu Leu Lys Leu Ala Cys Ser Asp Thr Phe Ile Asn
                                               125
                           120
Asp Leu Met Ile Tyr Thr Val Gly Ala Leu Thr Ile Ile Leu Pro Phe
                       135
                                            140
Ile Gly Ile Met Ile Ser Tyr Val His Ile Phe Met Ala Val Leu Lys
                                       155
                   150
Ile Ser Ser Val Ser Gly Lys Gln Lys Val Phe Ser Thr Cys Gly Ser
                                                       175
               165
                                   170
His Leu Thr Val Val Cys Leu Phe Tyr Gly Thr Ile Ile Gly Val Tyr
                                                   190
                               185
Phe Ser Pro Thr Ser Thr His Thr Ala Gln Gln Asp Thr Ala Ala Thr
                           200
Val Met Tyr Thr Val Val Thr Pro
                       215
    210
<210> 2510
<211> 216
<213> Unknown (p92-dir-0-8 conceptual translation of range 2-649)
<400>2510
Leu Phe Asp Ile Cys Phe Thr Ser Thr Thr Ile Pro Lys Met Leu Val
                                   10
Asn His Ile Ser Lys Asn Lys Val Ile Pro Tyr Ser Met Cys Leu Thr
                                25
```

```
Gln Thr Phe Phe Ser Trp Phe Ile Gly Thr Asp Gly Val Leu Leu
Ala Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Ala Pro Leu His
                        55
Cys Thr Met Ile Ile Thr Pro Arg Val Cys Val Phe Leu Val Ala Val
                    70
                                        75
Ser Trp Ile Trp Thr Cys Val Asn Ser Leu Ile His Thr Thr Ser Leu
                85
                                    90
Asn Arg Leu Ser Phe Cys Gly His Asn Glu Ile His His Phe Phe Cys
                                105
            100
Asp Leu Ser Ala Leu Ile Lys Leu Ala Cys Ser Asp Thr Phe Ile Asn
                            120
                                                125
Asp Leu Leu Ile Tyr Thr Val Gly Gly Leu Lys Ala Ile Val Pro Phe
                                             140
                        135
Ile Gly Ile Leu Leu Ser Tyr Ile His Ile Phe Val Ala Val Leu Arg
                    150
                                         155
Ile Pro Ser Ala Gly Gly Lys Arg Lys Ala Phe Ser Thr Cys Gly Ser
                165
                                    170
                                                         175
His Leu Thr Val Val Cys Leu Phe Tyr Gly Thr Ile Ile Gly Val Tyr
            180
                                185
                                                    190
Phe Ser Pro Thr Ser Thr His Thr Ala Gln Lys Asp Thr Ala Val Ala
                            200
Val Met Tyr Thr Val Val Thr Pro
<210> 2511
<211> 216
<212> PRT
<213> Unknown (p95-dir-0-8 conceptual translation of range 2-649)
<220>
<221> VARIANT
<222> (1)...(216)
<223> Xaa = Any Amino Acid
<400>2511
Leu Val Asp Ile Cys Phe Thr Ser Thr Thr Ile Pro Lys Thr Leu Val
Asn Tyr Val Ser Gly Asn Lys Ala Ile Leu Tyr Ile Ser Cys Leu Ala
            20
                                25
                                                    30
Gln Val Phe Phe Phe Ser Trp Phe Ala Gly Leu Asp Ser Ile Leu Leu
                            40
                                                45
Ala Ser Met Ala Tyr Asp Arg Xaa Ile Ala Ile Cys Asp Pro Leu His
                        55
                                            60
Tyr Thr Thr Val Met Thr Pro Arg Val Cys Val Leu Leu Val Ala Met
Cys Leu Phe Gly Gly Cys Ala Asn Ser Leu Thr His Asn Ile Leu Leu
                85
Thr Gln Leu Ser Phe Cys Gly His Thr Glu Ile Pro Leu Phe Phe Cys
           100
                                105
Asp Leu Asn Val Val Ile Arg Leu Ala Cys Ser Asp Thr Phe Ile Asn
                            120
                                                125
Asp Trp Met Ile Tyr Thr Met Gly Gly Leu Thr Ala Ile Ile Pro Phe
                        135
                                            140
Ser Gly Ile Leu Ile Ser Tyr Ile His Ile Phe Val Ala Met Leu Arg
                   150
                                        155
Ile Leu Ser Ala Gln Gly Lys Trp Lys Val Phe Ser Thr Cys Gly Ser
               165
                                    170
His Leu Ile Ala Val Tyr Leu Leu Asn Gly Thr Ile Ile Gly Val Tyr
                                185
Leu Asn Pro Thr Ser Ser His Thr Ala Gln Gln Asp Thr Ala Ser Ala
```

```
195
                            200
                                                205
Val Met Tyr Thr Met Val Thr Pro
    210
<210> 2512
<211> 216
<212> PRT
<213> Unknown (p125-dir-0-8 conceptual translation of range 2-649)
<400>2512
Phe Val Asp Leu Cys Phe Thr Thr Thr Val Pro Lys Met Leu Val
                                    10
Asn His Ile Ser Gly Asn Lys Thr Ile Pro Tyr Ala Gly Cys Leu Thr
                                25
Gln Met Phe Phe Ile Trp Phe Ala Ser Ile Asp Ser Phe Leu Leu
                            40
Val Ala Met Ala Tyr Asp Arg Tyr Ile Ala Ile Cys His Pro Leu Arg
                        55
Tyr Ala Ser Leu Met Ile Pro Arg Leu Cys Ala Leu Leu Val Ala Thr
Ser Trp Ser Phe Ala Cys Ile Asn Ala Leu Thr His Thr Val Leu Leu
Thr Gln Leu Ser Phe Cys Ser His Asn Glu Ile Pro His Phe Phe Cys
            100
                               105
Asp Leu Ser Pro Leu Leu Lys Leu Ser Cys Ser Asp Thr Phe Ile Asn
                            120
                                                125
Asp Val Leu Val Tyr Thr Val Gly Ala Leu Pro Ile Leu Met Pro Phe
                        135
                                            140
Val Gly Ile Leu Val Ser Tyr Thr Arg Ile Phe Ala Ala Val Leu Arg
                    150
                                        155
Ile Pro Ser Ala Arg Gly Lys Arg Lys Ala Phe Ser Thr Cys Gly Ser
                165
                                    170
His Leu Ser Val Val Ser Leu Phe Tyr Gly Ala Val Ile Gly Val Tyr
            180
                                185
Leu Ser Pro Met Ser Tyr His Thr Val Glu Lys Asp Thr Ala Ala Ala
                            200
Val Met Tyr Thr Val Val Thr Pro
<210> 2513
<211> 216
<213> Unknown (p123-dir-0-8 conceptual translation of range 2-649)
<400>2513
Phe Val Asp Leu Cys Leu Thr Thr Thr Thr Val Pro Lys Met Leu Leu
                                    10
Asn Ile Gln Thr Gln Lys Lys Thr Ile Ser Tyr Ala Gly Cys Leu Thr
            20
                                25
Gln Met Tyr Phe Phe Leu Leu Leu Leu Asp Leu Asp Asn Met Ile Leu
                            40
                                                45
Ala Val Met Ala Phe Asp Arg Tyr Met Ala Ile Cys His Pro Leu His
                        55
Tyr Thr Ser Val Met Leu Pro Ser Leu Cys Gly Leu Leu Met Ala Val
                                        75
Leu Trp Val Val Ala Asn Leu Phe Ser Leu Leu Phe Thr Leu Leu Met
                                    90
Ala Gln Leu Ser Phe Cys Gly Asn Asn Thr Ile Pro His Phe Phe Cys
           100
                                105
                                                    110
Asp Leu Ser Val Leu Leu Lys Leu Ser Cys Ser Asp Thr His Ile Val
        115
                            120
```

```
Glu Asn Leu Leu Ile Val Ser Gly Leu Leu Gly Val Thr Pro Leu
                       135
                                           140
Ile Cys Ile Leu Val Ser Tyr Ser Arg Ile Val Ala Thr Val Met Arg
                    150
                                        155
Ile Pro Ser Ala Lys Gly Lys Arg Lys Thr Phe Ser Thr Cys Gly Ser
                165
                                    170
                                                        175
His Leu Thr Val Val Ala Leu Phe Tyr Cys Ala Gly Phe Gly Val Phe
            180
                                185
Phe Thr Pro Pro Ser Ser His Ser Gly Gly Lys Asp Thr Ala Ala Ser
                            200
                                                205
Val Met Tyr Thr Val Val Thr Pro
    210
<210> 2514
<211> 222
<212> PRT
<213> Unknown (3983377-dir-0-8 conceptual translation of range 1-666)
Ala Asn Leu Ser Ser Val Asp Ile Ser Ala Pro Ser Val Ile Val Pro
                5
                                    10
Lys Ala Leu Val Asn His Met Leu Gly Ser Lys Ser Ile Ser Tyr Thr
            20
                                25
                                                    30
Gly Cys Met Thr Gln Ile Tyr Phe Phe Ile Thr Phe Asn Asn Met Asp
       35
                           40
                                                45
Gly Phe Leu Leu Ser Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys
                        55
His Pro Leu His Tyr Thr Met Met Arg Pro Arg Leu Cys Val Leu
                    70
                                        75
Leu Val Ala Ile Ser Trp Ala Ile Thr Asn Leu His Ala Leu Leu His
                85
                                    90
Thr Leu Leu Met Val Arg Leu Thr Phe Cys Ser His Asn Ala Val His
            100
                                105
                                                    110
His Phe Phe Cys Asp Pro Tyr Pro Ile Leu Lys Leu Ser Cys Ser Asp
                                                125
                            120
Thr Phe Ile Asn Asp Leu Met Val Phe Thr Ile Gly Gly Leu Val Phe
                       135
                                           140
Met Thr Pro Phe Thr Cys Ile Ile Val Ser Tyr Ala Tyr Ile Phe Ser
                   150
                                        155
Lys Val Leu Lys Leu Lys Ser Ala His Gly Ile Arg Lys Ala Leu Ser
               165
                                    170
Thr Cys Gly Ser His Leu Thr Val Val Ser Leu Phe Tyr Gly Ala Ile
                                185
                                                    190
           180
Leu Gly Ile Tyr Met His Pro Ser Ser Thr Tyr Thr Val Gln Asp Thr
        195
                           200
                                                205
Val Ala Thr Val Ile Phe Thr Val Val Thr Pro Met Val Asn
                       215
<210> 2515
<211> 156
<212> PRT
<213> Unknown (902714-dir-0-6 conceptual translation of range 2-469)
<400>2515
Ile Cys His Pro Leu His Tyr Thr Val Met Met Arg Pro Arg Leu Cys
                                    10
Val Leu Leu Val Ala Val Ser Trp Val Ile Thr Asn Leu His Ala Leu
                                25
Leu His Thr Leu Leu Met Val Gln Leu Thr Phe Cys Ser His Asn Ala
Val His His Phe Phe Cys Asp Pro Tyr Pro Ile Leu Lys Leu Ser Cys
```

```
55
Ser Asp Thr Phe Ile Asn Asp Ile Thr Ala Phe Thr Val Gly Gly Leu
                   70
Thr Ser Ile Thr Pro Phe Thr Cys Ile Thr Val Ser Tyr Ala Tyr Ile
                85
                                    90
Leu Ser Ser Val Leu Lys Phe Pro Ser Ile Gln Gly Ile Arg Lys Ala
            100
                                105
                                                    110
Leu Ser Thr Cys Gly Ser His Leu Thr Val Val Ser Leu Phe Tyr Gly
                           120
                                               125
Ala Ile Leu Gly Val Tyr Met His Pro Ser Ser Thr Tyr Ser Leu Gln
                       135
Asp Thr Val Ala Thr Ala Phe Phe Thr Val Val Thr
                   150
<210> 2516
<211> 216
<213> Unknown (OST034-dir-0-8 conceptual translation of range 2-649)
<400>2516
Phe Ala Asp Ile Ser Ser Ile Ser Asn Ser Val Pro Lys Met Leu Val
               5
                                   10
Asn Ile Gln Thr Lys Ser Gln Ser Ile Ser Tyr Glu Ser Cys Ile Thr
                               25
Gln Met Tyr Phe Ser Ile Val Phe Val Val Ile Asp Asn Leu Leu Leu
        35
                           40
Gly Thr Met Ala Tyr Asp His Phe Val Ala Ile Cys His Pro Leu Asn
                       55
Tyr Thr Ile Leu Met Arg Pro Arg Phe Gly Ile Leu Leu Thr Val Ile
Ser Trp Phe Leu Ser Asn Ile Ile Ala Leu Thr His Thr Leu Leu Leu
                                   90
Ile Gln Leu Leu Phe Cys Asn His Asn Thr Leu Pro His Phe Cys
                               105
Asp Leu Ala Pro Leu Leu Lys Leu Ser Cys Ser Asp Thr Leu Ile Asn
                           120
                                               125
Glu Leu Val Leu Phe Ile Val Gly Leu Ser Val Ile Ile Phe Pro Phe
                       135
Thr Leu Ser Phe Phe Ser Tyr Val Cys Ile Ile Arg Ala Val Leu Arg
                                       155
Val Ser Ser Thr Gln Gly Lys Trp Lys Ala Phe Ser Thr Cys Gly Ser
                                   170
His Leu Thr Val Val Leu Leu Phe Tyr Gly Thr Ile Val Gly Val Tyr
          180
                               185
Phe Phe Pro Ser Ser Thr His Pro Glu Asp Thr Asp Lys Ile Gly Ala
                                 205
      195
                          200
Val Leu Phe Thr Val Val Thr Pro
   210
<210> 2517
<211> 323
<213> Unknown (p156-dir-0-12 conceptual translation of range 34-1003)
<400>2517
Ser Glu Leu Leu Glu Gly Gly Asn Gln Thr Ser Thr Phe Glu Phe Leu
Leu Trp Gly Leu Ser Asp Gln Pro Gln Gln Gln His Ile Phe Phe Leu
           20
                               25
Leu Phe Leu Trp Met Tyr Val Val Thr Val Ala Gly Asn Leu Leu Ile
```

40

```
Val Leu Ala Ile Gly Thr Asp Thr His Leu His Thr Pro Met Tyr Phe
                        55
Phe Leu Ala Ser Leu Ser Cys Ala Asp Ile Phe Phe Thr Ser Thr Thr
                                        75
Val Pro Lys Ala Leu Val Asn Ile Gln Thr Gln Ser Arg Ser Ile Ser
                                    90
Tyr Ala Gly Cys Leu Ala Gln Leu Tyr Phe Phe Gly Thr Ala Leu Leu
                               105
Leu Leu Thr Phe Gly Asp Met Asp Ile Phe Leu Leu Ala Thr Met Ala
                            120
                                                125
Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu His Tyr Met Met Ile
                       135
                                            140
Met Ser Leu His Arg Cys Ala Leu Leu Val Thr Ala Cys Trp Thr Leu
                    150
                                        155
Thr Ser Leu Val Ala Met Thr His Thr Phe Leu Ile Phe Arg Leu Ser
                                    170
                165
Phe Cys Ser Lys Ile Leu Pro Asp Phe Phe Cys Asp Leu Gly Pro Leu
                                185
Met Lys Val Ser Cys Ser Asp Ala Gln Val Asn Glu Leu Val Leu Leu
                            200
                                                205
Phe Leu Gly Gly Ala Val Ile Leu Ile Pro Phe Met Leu Ile Leu Val
                        215
                                            220
Ser Tyr Ile Arg Ile Val Ser Ala Ile Leu Arg Ala Pro Ser Ala Gln
                    230
                                        235
Gly Arg Cys Lys Ala Phe Ser Thr Cys Gly Ser His Leu Val Val Val
                245
                                    250
Ala Leu Phe Phe Gly Thr Val Ile Arg Ala Tyr Leu Cys Pro Ser Ser
                                265
Ser Ser Ser Asn Ser Val Lys Glu Asp Thr Val Ala Ala Val Met Tyr
                            280
                                                285
Thr Val Val Thr Pro Leu Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn
                        295
                                            300
Lys Asp Met Lys Ala Ala Val Val Arg Leu Leu Lys Gly Arg Val Ser
Leu Ser Gln
<210> 2518
<211> 320
<213> Unknown (p38-dir-0-11 conceptual translation of range 34-993)
<400>2518
Ser Asp Leu Leu Glu Gly Gly Asn Gln Thr Ser Thr Phe Glu Phe Leu
                                    10
Leu Ser Gly Leu Ser Asp Gln Pro Gln Gln His Ile Leu Phe Leu
                                25
Leu Phe Leu Trp Met Tyr Val Val Thr Val Ala Gly Asn Leu Leu Ile
Val Leu Ala Ile Gly Thr Asp Thr His Leu His Thr Pro Met Tyr Phe
                        55
Phe Leu Ala Ser Leu Ser Cys Ala Asp Ile Phe Phe Thr Ser Thr Thr
                   70
                                        75
```

90

Val Pro Lys Ala Leu Val Asn Ile Gln Thr Gln Ser Arg Ser Ile Ser

Tyr Ala Gly Cys Leu Ala Gln Leu Tyr Phe Phe Leu Thr Phe Gly Asp
100

Met Asp Ile Phe Leu Leu Ala Thr Met Ala Tyr Asp Arg Tyr Met Ala
115

120

125

Ile Cys His Pro Leu His Tyr Met Met Ile Met Ser Leu His Arg Cys

135

85

130

```
Ala Leu Leu Val Thr Ala Cys Trp Thr Leu Thr Ser Leu Val Ala Met
                    150
                                        155
Thr His Thr Phe Leu Ile Phe Arg Leu Ser Phe Cys Ser Lys Ile Ile
                                    170
Pro Asp Phe Phe Cys Asp Leu Gly Pro Leu Met Lys Val Ser Cys Ser
            180
                                185
Asp Thr Gln Val Ser Glu Leu Val Leu Phe Leu Gly Gly Ala Val
                            200
Ile Leu Ile Pro Phe Met Leu Ile Leu Val Ser Tyr Ile Arg Ile Val
                        215
                                            220
Ser Ala Ile Leu Arg Ala Pro Ser Ala Gln Gly Arg Arg Lys Ala Phe
                    230
                                        235
Ser Thr Cys Gly Ser His Leu Val Val Val Ala Leu Phe Phe Gly Thr
                245
                                    250
Val Ile Arg Ala Tyr Leu Cys Pro Ser Ser Ser Ser Ser Asn Ser Val
                                265
            260
Asp Glu Asp Thr Ala Ala Ala Val Met Tyr Thr Val Val Thr Pro Leu
                            280
                                                285
Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys Ala Ala
                       295
Val Val Arg Leu Leu Lys Gly Arg Val Ser Phe Ser Gln Gly Gln Gly
                    310
<210> 2519
<211> 317
<212> PRT
<213> Unknown (p27-dir-0-11 conceptual translation of range 34-984)
<220>
<221> VARIANT
<222> (1)...(317)
<223> Xaa = Any Amino Acid
<400>2519
Ser Glu Leu Leu Glu Gly Gly Asn Gln Thr Ser Thr Phe Glu Phe Leu
Leu Trp Gly Leu Ser Asp Gln Pro Gln Gln His Ile Phe Phe Leu
           20
                                25
Leu Phe Leu Trp Met Tyr Val Val Thr Val Ala Gly Asn Leu Leu Ile
                            40
Val Leu Ala Ile Gly Thr Asp Thr His Leu His Thr Pro Met Tyr Phe
                        55
Phe Leu Ala Ser Leu Ser Cys Ala Asp Ile Phe Ser Thr Ser Thr Thr
                    70
                                        75
Val Pro Lys Ala Leu Val Asn Ile Gln Thr Gln Ser Arg Ser Ile Ser
               -85-
                                    90
                                            - -
Tyr Ala Gly Cys Leu Ala Gln Leu Tyr Phe Phe Leu Thr Phe Gly Asp
           100
                                105
Met Asp Ile Phe Leu Pro Ala Thr Met Ala Tyr Asp Arg Tyr Val Ala
                            120
                                                125
Ile Cys His Leu Leu His Tyr Met Met Ile Met Ser Leu His Arg Cys
                        135
                                            140
Ala Phe Leu Val Thr Ala Cys Trp Thr Leu Thr Ser Leu Leu Ala Met
                    150
                                        155
Thr Arg Thr Phe Leu Ile Phe Arg Leu Ser Leu Cys Ser Xaa Ile Leu
                165
                                    170
Pro Gly Phe Phe Cys Asp Leu Gly Pro Leu Met Lys Val Ser Cys Ser
                                185
Asp Ala Gln Val Asn Glu Leu Val Leu Leu Phe Leu Gly Gly Ala Val
                           200
                                                205
Ile Leu Ile Pro Phe Met Leu Ile Leu Val Ser Tyr Ile Arg Ile Val
```

```
210
                         215
                                             220
  Ser Ala Ile Leu Arg Ala Pro Ser Ala Gln Gly Arg Arg Lys Ala Phe
                     230
                                         235
  Ser Thr Cys Asp Ser His Leu Val Val Val Ala Leu Phe Phe Gly Thr
                                      250
  Val Ile Arg Ala Tyr Leu Cys Pro Ser Ser Ser Ser Asn Ser Val
                                 265
                                                     270
  Lys Glu Asp Thr Ala Ala Ala Val Met Tyr Thr Val Val Thr Pro Leu
                             280
                                                 285
  Leu Asn Pro Phe Ile Tyr Ser Met Arg Asn Lys Asp Met Lys Ala Ala
                        295
                                             300
  Val Val Arg Leu Leu Lys Gly Arg Val Ser Phe Ser Gln
                     310
  <210> 2520
  <211> 242
  <212> PRT
  <213> Unknown (p80-dir-0-9 conceptual translation of range 5-731)
 <400>2520
 Thr Asp Ile Phe Phe Thr Ser Thr Thr Val Pro Lys Ala Leu Val Asn
                 - 5
                                     10
 Ile Gln Thr Gln Ser Thr Ser Ile Ser Tyr Ala Gly Cys Leu Ala Gln
                                  25
 Leu Tyr Phe Phe Leu Thr Phe Gly Asp Met Asp Ile Phe Leu Leu Ala
                             40
 Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu His Tyr
                         55
 Met Met Ile Met Ser Leu Arg Arg Cys Ala Val Leu Val Ala Ala Cys
                     70
                                         75
 Trp Thr Leu Thr Ser Leu Val Ala Met Thr His Thr Phe Leu Ile Ser
                                     90
 Gln Leu Ser Phe Cys Ser Lys Ile Ile Pro Asp Phe Phe Cys Asp Leu
                                 105
 Gly Pro Leu Met Lys Val Ser Cys Phe Asp Thr Gln Val Asn Glu Leu
                             120
                                                 125
 Val Leu Leu Phe Leu Gly Gly Thr Val Ile Leu Ile Pro Phe Met Leu
                         135
                                             140
 Val Leu Val Ser Tyr Ile Gln Ile Val Ser Ala Ile Leu Arg Ala Pro
                     150
                                         155
 Ser Ala Gln Gly Arg Arg Lys Ala Phe Ser Thr Cys Gly Ser His Leu
                 165
                                     170
 Val Val Val Ala Leu Phe Phe Gly Thr Val Ile Arg Ala Tyr Leu Cys
                                 185
                                                     190
             180
 Pro Ser Ser Ser Ser Ser Ser Val Glu Glu Asp Thr Ala Ala Ala
                             200
 Val Met Tyr Thr Val Val Thr Pro Leu Leu Asn Pro Phe Ile Tyr Ser
                        215
                                             220
 Leu Arg Asn Lys Asp Met Lys Ala Ala Val Val Arg Leu Leu Lys Gly
 225
                    230
                                         235
 Arg Val
 <210> 2521
 <211> 225
 <212> PRT
 <213> Unknown (3983403-dir-0-8 conceptual translation of range 1-675)
· <400>2521
 Ala Thr Leu Ser Cys Val Asp Ile Leu Phe Thr Ser Thr Thr Val Pro
```

5

```
Lys Ala Leu Val Asn Ile His Thr Gln Ser Arg Thr Ile Ser Tyr Ala
                                 25
 Gly Cys Leu Val Gln Leu Tyr Phe Phe Leu Thr Phe Gly Asp Met Asp
 Ile Phe Leu Leu Ala Thr Met Ala Tyr Asp Arg Phe Val Ala Ile Cys
 His Pro Leu His Tyr Arg Met Ile Met Ser Phe Gln Arg Cys Ser Leu
                     70
 Leu Val Thr Val Cys Trp Thr Leu Thr Thr Val Val Ala Met Thr His
                 85
                                     90
 Thr Phe Leu Ile Phe Arg Leu Ser Phe Cys Ser Gln Lys Val Ile Pro
             100
                                 105
 Asp Phe Phe Cys Asp Leu Gly Pro Leu Met Lys Ile Ala Cys Ser Glu
                             120
 Thr Arg Ile Asn Glu Leu Val Leu Leu Phe Leu Gly Gly Ala Val Ile
                        135
                                             140
Leu Ile Pro Phe Leu Leu Ile Leu Met Ser Tyr Ile Arg Ile Val Ser
                    150
                                         155
Ala Ile Leu Arg Val Pro Ser Ala Gln Gly Arg Arg Lys Ala Phe Ser
                                     170
Thr Cys Gly Ser His Leu Ser Val Val Ala Leu Phe Phe Gly Thr Val
            180
                                185
Ile Arg Ala Tyr Leu Cys Pro Ser Ser Ser Ser Ser Asn Ser Val Val
                            200
Glu Asp Thr Ala Ala Ala Val Met Tyr Thr Val Val Thr Pro Val Leu
                        215
Asn
225
<210> 2522
<211> 217
<212> PRT
<213> Unknown (p144-dir-0-8 conceptual translation of range 5-654)
Asp Asp Ile Leu Leu Val Ser Thr Ile Val Pro Lys Ala Leu Val Asn
Ile His Thr Gln Ser Arg Thr Ile Ser Tyr Ala Gly Cys Leu Val Gln
                                25
Leu Tyr Phe Phe Leu Thr Phe Gly Asp Met Asp Ile Phe Leu Leu Ala
                            40
Thr Met Ala Tyr Asp Arg Phe Val Ala Ile Cys His Pro Leu His Tyr
                        55
Arg Met Ile Met Ser Phe Gln Arg Cys Ser Leu Leu Val Thr Val Cys
                    70
                                        75
Trp Ile Leu Thr Thr Val Val Ala Met Thr His Thr Phe Leu Ile Phe
                85
                                    90
Trp Phe Ser Phe Tyr Ser Lys Lys Val Ile Pro Gly Phe Phe Cys Asp
            100
                                105
Leu Glu Pro Leu Ile Lys Ile Pro Cys Ser Glu Thr Arg Ile Asn Glu
                            120
                                                125
Leu Val Leu Leu Phe Leu Gly Ser Ala Val Val Phe Ile Leu Leu Leu
                        135
                                            140
Leu Ile Leu Val Ser Tyr Ile Gln Ile Val Ser Ala Ile Phe Arg Val
                    150
                                        155
Pro Ser Ala Gln Gly Arg His Lys Ala Phe Ser Thr Cys Gly Ser His
                165
                                    170
Leu Ser Val Val Ala Leu Phe Phe Gly Thr Val Ile Arg Ala Tyr Leu
            180
                                185
                                                    190
Cys Pro Ser Ser Ser Ser Asn Ser Val Val Glu Asp Thr Ala Ala
        195
                            200
```

```
Ala Val Met Tyr Thr Val Val Thr Pro
<210> 2523
<211> 215
<212> PRT
<213> Unknown (pl11-dir-0-8 conceptual translation of range 2-646)
<220>
<221> VARIANT
<222> (1)...(215)
<223> Xaa = Any Amino Acid
<400>2523
Val Val Asp Val Cys Phe Ser Ser Thr Thr Val Pro Lys Met Leu Ala
                                    10
Asp Met Gln Thr Gly Ser His Thr Ile Ser Gln Ala Asp Cys Leu Ser
                                25
                                                    30
Gln Val Tyr Phe Ser Ile Leu Phe Gly Asp Leu Asp Asp Phe Leu Leu
                                               45
                            40
Ala Val Met Ser Phe Asp Xaa Tyr Met Ala Ile Cys Arg Pro Leu Cys
                        55
Tyr Ala Thr Ala Met Ser Ser Gln Cys Cys Val Leu Leu Val Ala Thr
                    70
Cys Trp Val Ile Ala Gln Leu Asn Ser Leu Leu His Thr Val Leu Leu
                                    90
Ala Gln Leu Thr Phe Cys Ala Asp His Thr Ile Pro His Phe Phe Cys
                                105
            100
Asp Leu Ala Leu Leu Pro Leu Ser Cys Ser Asp Thr Ser Ile Asn
                                                125
                            120
Glu Leu Val Leu Met Ser Met Gly Gly Ala Gly Ile Leu Ile Pro Leu
                        135
                                            140
Met Cys Ile Leu Gly Ser Tyr Ala Gln Ile Ile Ser Ala Ile Leu Arg
                   150
                                        155
Met Pro Ser Ala Gly Ser Lys Arg Ile Ala Phe Ser Thr Ser Ser Ser
               165
                                    170
His Leu Ala Val Val Ser Leu Phe Tyr Gly Thr Val Ile Ser Glu Tyr
            180
                               185
Leu Cys Pro Ser Pro Ser Gly Ser Ser Asp Glu Ser Ser Leu Ala Ala
                            200
      195
Val Leu Tyr Ala Val Val Thr
<210> 2524
<211> 216
<212> PRT
<213> Unknown (2921629-dir-0-8 conceptual translation of range 2-649)
<400>2524
Phe Val Asp Met Gly Leu Thr Ser Ser Thr Val Thr Lys Met Leu Val
                                    10
1
Asn Ile Gln Thr Arg His His Thr Ile Thr Tyr Thr Gly Cys Leu Thr
                                                    30
                                25
            20
Gln Met Tyr Phe Phe Leu Met Phe Gly Asp Leu Asp Ser Phe Phe Leu
                            40
Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu Cys
                        55
                                            60
Tyr Ser Thr Val Met Arg Pro Gln Val Cys Ala Leu Met Leu Ala Leu
                                        75
                   70
Cys Trp Val Leu Thr Asn Ile Val Ala Leu Thr His Thr Phe Leu Met
```

```
Ala Arg Leu Ser Phe Cys Val Thr Gly Glu Ile Ala His Phe Phe Cys
           100
                               105
Asp Ile Thr Pro Val Leu Lys Leu Ser Cys Ser Asp Thr His Ile Asn
                                               125
                            120
Glu Met Met Val Phe Val Leu Gly Gly Thr Val Leu Ile Val Pro Phe
                       135
                                            140
Leu Cys Ile Val Thr Ser Tyr Ile His Ile Val Pro Ala Ile Leu Arg
                   150
                                        155
Val Arg Thr Arg Gly Gly Val Gly Lys Ala Phe Ser Thr Cys Ser Ser
                                   170
               165
His Leu Cys Val Val Cys Val Phe Tyr Gly Thr Leu Phe Ser Ala Tyr
                               185
           180
Leu Cys Pro Pro Ser Ile Ala Ser Glu Glu Lys Asp Ile Ala Ala Ala
                           200
Ala Met Tyr Thr Ile Val Thr Pro
<210> 2525
<211> 342
<212> PRT
<213> Unknown (1256388-dir-2-13 conceptual translation of range 379-1402)
<220>
<221> VARIANT
<222> (1)...(342)
<223> Xaa = Any Amino Acid
<400>2525
Phe Xaa Leu Ser Phe Leu Asn Tyr Arg Cys Ser Ile Arg Met Glu Asn
                5
                                    10
Gln Ser Ser Val Ser Glu Phe Phe Leu Arg Gly Ile Ser Gly Phe Pro
           20
                                25
Glu Gln Gln Gln Leu Leu Tyr Gly Leu Phe Leu Cys Met Tyr Leu Val
                            40
Thr Leu Thr Gly Asn Val Leu Ile Ile Leu Ala Ile Gly Ser Asp Pro
                        55
His Leu His Thr Pro Met Tyr Phe Phe Leu Ala Asn Leu Ser Phe Ala
                                        75
                    70
Asp Met Gly Leu Ile Ser Ser Thr Val Thr Lys Met Leu Phe Asn Val
               85
                                   90
Gln Thr Gln Cys His Thr Ile Ser Tyr Thr Gly Cys Leu Thr Gln Met
                               105
           100
Tyr Leu Phe Met Met Phe Gly Asp Leu Asp Ser Phe Phe Leu Ala Val
                                                125
                           120
Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu His Tyr Ser
                                            140
                       135
Thr Ile Met Asn Ala Arg Ile Cys Val Leu Met Leu Ile Leu Cys Trp
                    150
                                        155
Ile Leu Thr Asn Val Val Ala Leu Thr His Thr Leu Leu Met Ala Arg
                                    170
Leu Ser Phe Cys Val Val Gly Glu Ile Ala His Phe Phe Cys Asp Val
                                185
                                                    190
Thr Ser Val Met Lys Leu Ser Cys Ser Asp Thr His Val Asn Glu Leu
                            200
                                                205
Val Leu Ser Gly Phe Gly Gly Thr Val Leu Met Val Pro Phe Val Ser
                        215
                                            220
Ile Val Ile Ser Tyr Val His Ile Val Phe Ala Val Leu Arg Ile Gln
                   230
                                        235
Ser Ser Gly Gly Ser Ser Lys Ala Phe Ser Thr Cys Ser Ser His Leu
                                   250
               245
Cys Val Val Cys Val Phe Tyr Gly Thr Leu Phe Ser Val Tyr Leu Phe
```

```
265
                                                   270
Pro Ser Ser Val Glu Thr Thr Glu Lys Asp Val Ala Ala Ala Ala Met
                        280
                                               285
Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe Ile Tyr Ser Leu Arg
                      295
                                           300
Asn Lys Asp Ile Lys Gly Ala Leu Lys Arg Leu Leu Ser His Arg Arg
                310
                                       315
Ile Leu Ser Ser Xaa Ile Xaa Thr Arg Gln Val Phe Asn Lys Lys Thr
               325
                                   330
Gly Val Glu Ser Asp Lys
           340
<210> 2526
<211> 216
<212> PRT
<213> Unknown (p101-dir-0-8 conceptual translation of range 2-649)
<400>2526
Phe Ala Asp Ile Cys Phe Thr Ser Ala Ser Ile Pro Lys Met Leu Val
                                   10
Asn Ile Glu Thr Gln Gln Gln Thr Ile Ser Tyr Val Gly Cys Ile Thr
                               25
Gln Leu Tyr Phe Leu Leu Met Phe Gly Gly Leu Asp Asn Leu Leu Leu
                                               45
                           40
Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Arg Pro Leu His
                       55
Tyr Thr Thr Val Met Ser Pro Gln His Cys Val Leu Met Leu Ser Val
                                       75
Cys Trp Ala Leu Thr Asn Ile Pro Ala Leu Thr His Ser Ile Leu Leu
                                   90
Ala His Leu Asp Phe Cys Ser His His Ala Ile Pro His Phe Tyr Cys
           100
                               105
Asp Ile Ser Pro Leu Leu Lys Leu Ala Cys Ser Asp Ala His Leu Asn
                                               125
                           120
Glu Leu Met Val Ile Ile Met Gly Ala Ile Phe Leu Thr Gly Pro Leu
                       135
                                           140
Ala Leu Ile Val Leu Ser Tyr Ala His Ile Thr Ser Ala Ile Leu Gly
                   150
                                       155
Phe Ser Ser Pro Glu Gly Arg Trp Lys Ala Phe Ser Thr Cys Gly Ser
                                   170
               165
His Leu Thr Val Val Leu Leu Phe Tyr Gly Ser Leu Met Gly Val Tyr
                               185
                                                   190
          180
Leu Phe Pro Ser Ser Ser Tyr Ser Val Gln Arg Glu Ser Ser Ala Ala
       195
                           200
Val Leu Tyr Met Val Val Thr Pro
   210.
                       215
<210> 2527
<211> 176
<213> Unknown (3273640-dir-0-7 conceptual translation of range 4-531)
<400>2527
Gln Ala Leu Ala Tyr Asp Arg Phe Val Ala Ile Cys His Pro Leu His
                5
                                   10
Tyr Thr Thr Ile Met Ser Pro Gln Leu Cys Gly Leu Leu Ala Gly Gly
          20
                               25
Leu Trp Met Leu Ser Cys Phe Ile Ser Leu Thr His Ile Leu Leu Met
                           40
Ala Arg Leu Val Phe Cys Gly Asn Asn Lys Ile Pro His Tyr Phe Cys
```

55

..... .. ... ... ... ... ...

```
Asp Leu Thr Pro Leu Leu Arg Leu Ser Cys Thr Asp Thr Ser Val Asn
                     70
                                         75
 Lys Ile Phe Val Leu Ile Val Ala Gly Met Val Ile Ala Thr Pro Phe
                                     90
 Ile Cys Ile Leu Ala Ser Tyr Val Arg Ile Ile Val Ala Ile Met Lys
                                 105
 Val Pro Ser Ala Gly Gly Arg Lys Lys Ala Phe Ser Thr Cys Ser Ser
                             120
                                                 125
 His Leu Ser Val Val Ala Leu Phe Tyr Gly Thr Thr Ile Gly Val Tyr
                         135
 Leu Cys Pro Ser Ser Val Arg Thr Ala Val Lys Glu Lys Ala Ser Ala
                     150
                                         155
 Val Met Tyr Thr Ala Val Thr Pro Met Leu Asn Pro Phe Ile Cys Ser
                                     170
 <210> 2528
 <211> 175
 <212> PRT
<213> Unknown (3273644-dir-0-7 conceptual translation of range 4-528)
Ala Leu Glu Tyr Asp Arg Phe Leu Ala Ile Cys His Pro Leu His Tyr
                                     10
Thr Thr Ile Met Ser Pro Gln Leu Cys Gly Leu Leu Ala Gly Gly Leu
                                 25
Trp Met Leu Ser Cys Phe Ile Ser Leu Thr His Ile Leu Leu Met Ala
Arg Leu Val Phe Cys Gly Asn Asn Lys Ile Pro His Tyr Phe Cys Asp
                        55
Leu Thr Pro Leu Leu Arg Leu Ser Cys Thr Asp Thr Ser Val Asn Lys
                    70
                                        75
Ile Phe Val Leu Ile Val Ala Gly Met Val Ile Ala Thr Pro Phe Ile
                                     90
Cys Ile Leu Ala Ser Tyr Val Arg Ile Ile Val Ala Ile Met Lys Val
                                105
Pro Ser Ala Gly Gly Arg Lys Lys Ala Phe Ser Thr Cys Ser Ser His
                            120
                                                 125
Leu Ser Val Val Ala Leu Phe Tyr Gly Thr Thr Ile Gly Val Tyr Leu
                        135
                                            140
Cys Pro Ser Ser Val Arg Thr Ala Val Lys Glu Lys Ala Ser Ala Val
                   150
                                        155
Met Tyr Thr Ala Val Thr Pro Met Leu Asn Pro Phe Ile Cys Ser
                165
                                    170
                                                         175
<210> 2529
<211> 158
<212> PRT
<213> Unknown (3273656-dir-0-6 conceptual translation of range 4-477)
<400>2529
Ala Leu Glu Tyr Asp Arg Phe Leu Ala Ile Cys His Pro Leu His Tyr
                                    10
Thr Thr Met Ser Pro Gln Leu Cys Gly Leu Leu Ala Gly Gly Leu
                                25
Trp Met Leu Ser Cys Phe Ile Ser Leu Thr His Ile Leu Leu Met Ala
                            40
Arg Leu Val Phe Cys Gly Asn Asn Lys Ile Pro His Tyr Phe Cys Asp
                        55
                                            60
Leu Thr Pro Leu Leu Arg Leu Ser Cys Thr Asp Thr Ser Val Asn Lys
                                        75
Ile Phe Val Leu Ile Val Ala Gly Met Val Ile Ala Thr Pro Phe Ile
```

```
90
                85
Cys Ile Leu Ser Ser Tyr Val Arg Ile Ile Val Ala Ile Met Lys Val
                               105
Pro Ser Ala Gly Gly Arg Lys Lys Ala Phe Ser Thr Cys Ser Ser His
                           120
                                               125
Leu Ser Val Val Cys Thr Leu Tyr Gly Thr Thr Ile Gly Val Tyr Leu
                       135
                                           140
Cys Pro Ala Ser Val Arg Thr Ala Val Lys Glu Asn Ala Ser
                  150
<210> 2530
<211> 176
<212> PRT
<213> Unknown (3273650-dir-0-7 conceptual translation of range 1-528)
<400>2530
Gln Ala Leu Ala Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu His
                                   10
Tyr Thr Thr Ile Met Ser Pro Arg Leu Cys Gly Leu Leu Ala Gly Thr
        20
                               25
Pro Trp Met Phe Pro Thr Leu Phe Pro Leu Thr His Ile Leu Leu Met
                           40
                                               45
Val Arg Leu Val Phe Cys Gly Asn Asn Lys Ile Pro His Tyr Phe Cys
                       55
Asp Leu Thr Pro Leu Leu Arg Leu Ser Cys Thr Asp Thr Ser Val Asn
                   70
                                       75
Lys Ile Phe Val Leu Ile Val Ala Gly Met Val Ile Ala Thr Pro Phe
                                   90
               85
Ile Cys Ile Leu Ala Ser Tyr Val Arg Ile Ile Val Ala Ile Met Lys
                               105
Val Pro Ser Ala Gly Gly Arg Lys Lys Ala Phe Ser Thr Cys Ser Ser
                           120
His Leu Ser Val Val Thr Leu Leu Tyr Gly Thr Thr Ile Gly Val Tyr
                       135
                                          140
Leu Cys Pro Ser Ser Val Arg Thr Ala Val Lys Glu Lys Ala Ser Ala
                                     155
145 150
Val Met Tyr Thr Leu Val Thr Pro Met Leu Asn Pro Phe Ile Cys Ser
                                   170
<210> 2531
<211> 157
<212> PRT
<213> Unknown (902676-dir-0-6 conceptual translation of range 2-472)
<400>2531
Ile Cys His Pro Leu His Tyr Ser Thr Ile Met Ser Pro Arg Leu Cys
                                   10
Gly Leu Leu Val Gly Val Pro Trp Val Tyr Ser Cys Phe Ile Ser Leu
                               25
Thr His Ile Leu Leu Met Ala Arg Leu Val Phe Cys Gly Lys Asn Glu
                                               45
                           40
Leu Pro His Tyr Phe Cys Asp Leu Thr Pro Leu Leu Arg Leu Ser Cys
                       55
Thr Asp Thr Thr Val Asn Lys Ile Phe Val Leu Ile Val Ala Gly Met
                                       75
Val Ile Ala Thr Pro Phe Val Cys Ile Leu Ala Ser Tyr Ala Arg Ile
                                   90
Ile Val Ala Ile Met Lys Val Pro Ser Ala Gly Gly Arg Lys Lys Ala
           100
                               105
Phe Ser Thr Cys Ser Ser His Leu Ser Val Val Ala Leu Phe Tyr Gly
                           120
```

```
Thr Thr Ile Gly Val Tyr Leu Cys Pro Ser Ser Val Arg Thr Ala Val
                        135
 Lys Glu Lys Ala Ser Ala Val Met Tyr Thr Ala Val Thr
 <210> 2532
 <211> 313
 <212> PRT
 <213> Unknown (p82-dir-0-11 conceptual translation of range 1-939)
 <400>2532
Met Glu Pro Arg Asn Gln Thr Ser Ala Ser Gln Phe Ile Leu Leu Gly
                 5
                                     10
Leu Ser Glu Lys Pro Glu Gln Glu Thr Leu Leu Phe Ser Leu Phe Phe
            20
                                 25
Cys Met Tyr Leu Val Met Val Val Gly Asn Leu Leu Ile Ile Leu Ala
                             40
                                                 45
Ile Ser Ile Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ala
                         55
                                             60
Asn Leu Ser Leu Val Asp Phe Cys Leu Ala Thr Asn Thr Ile Pro Lys
                    70
                                         75
Met Leu Val Ser Leu Gln Thr Gly Ser Lys Ala Ile Ser Tyr Pro Cys
                85
Cys Leu Ile Gln Met Tyr Phe Phe His Phe Phe Gly Ile Val Asp Ser
            100
                                 105
Val Ile Ile Ala Met Met Ala Tyr Asp Arg Phe Val Ala Ile Cys His
        115
                             120
Pro Leu His Tyr Ala Lys Ile Met Ser Leu Arg Leu Cys Arg Leu Leu
                        135
                                             140
Val Gly Ala Leu Trp Ala Phe Ser Cys Phe Ile Ser Leu Thr His Ile
                    150
                                        155
Leu Leu Met Ala Arg Leu Val Phe Cys Gly Ser His Glu Val Pro His
                                    170
                165
Tyr Phe Cys Asp Leu Thr Pro Ile Leu Arg Leu Ser Cys Thr Asp Thr
            180
                                 185
Ser Val Asn Arg Ile Phe Ile Leu Ile Val Ala Gly Met Val Ile Ala
        195
                            200
                                                 205
Thr Pro Phe Val Cys Ile Leu Ala Ser Tyr Ala Arg Ile Leu Val Ala
                        215
                                            220
Ile Met Lys Val Pro Ser Ala Gly Gly Arg Lys Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ser Ser His Leu Ser Val Val Ala Leu Phe Tyr Gly Thr Thr Ile
                245
                                    250
Gly Val Tyr Leu Cys Pro Ser Ser Val Leu Thr Thr Val Lys Glu Lys
            260
                                265
Ala Ser Ala Val Met Tyr Thr Ala Val Thr Pro Met Leu Asn Pro Phe
       275
                            280
Ile Tyr Ser Leu Arg Asn Arg Asp Leu Lys Gly Ala Leu Arg Lys Leu
                        295
                                            300
Val Asn Arg Lys Ile Thr Ser Ser Ser
                    310
<210> 2533
<211> 157
<212> PRT
<213> Unknown (902331-dir-0-6 conceptual translation of range 2-472)
<400>2533
Ile Cys His Pro Leu His Tyr Thr Ala Arg Met Asn Leu Cys Leu Cys
Val Gln Leu Val Ala Gly Leu Trp Leu Val Thr Tyr Leu His Ala Leu
```

```
25
 Leu His Thr Val Leu Ile Ala Gln Leu Ser Phe Cys Ala Ser Asn Ile
                            40
                                                 45
 Ile His His Phe Leu Cys Asp Leu Asn Pro Leu Leu Gln Leu Ser Cys
                        55
 Ser Asp Val Ser Phe Asn Val Met Ile Ile Phe Ala Val Gly Asp Leu
                    70
 Leu Ala Leu Thr Pro Leu Val Cys Ile Leu Val Ser Tyr Gly Leu Ile
                85
                                    90
 Phe Ser Thr Val Leu Lys Ile Thr Ser Thr Gln Gly Lys Gln Arg Ala
            100
                                105
 Val Ser Thr Cys Ser Cys His Leu Ser Val Val Val Leu Phe Tyr Gly
                            120
                                                 125
 Thr Ala Ile Ala Val Tyr Phe Ser Pro Ser Ser Pro His Met Pro Glu
                        135
                                            140
 Ser Asp Thr Leu Ser Thr Ile Met Tyr Ser Met Val Ala
                    150
<210> 2534
<211> 217
<212> PRT
<213> Unknown (p152-rev-0-8 conceptual translation of range 2-652)
<400>2534
Phe Leu Asp Ile Gly Phe Ile Ser Thr Ile Ile Pro Lys Met Leu Asp
His Ile Ser Ser Gly Ile Lys Leu Ile Ser Tyr Gly Glu Cys Leu Thr
            20
                                25
Gln Leu Tyr Phe Ser Gly Leu Phe Ala Asp Leu Asp Asn Asn Phe Leu
                            40
                                                45
Leu Ala Val Met Ala Leu Asp Arg Tyr Val Ala Ile Ser His Pro Leu
                                            60
His Tyr Ala Leu Thr Met Asn Ser Gln Arg Cys Val Leu Leu Val Ala
                    70
                                        75
Val Ser Trp Val Ile Thr Ile Leu His Ala Leu Val His Thr Leu Leu
               85
                                    90
Val Thr Arg Leu Ser Phe Cys Gly Pro Asn Ile Ile Pro His Phe Phe
                                105
                                                    110
Cys Asp Leu Val Pro Leu Leu Lys Leu Ala Cys Ser Ser Thr Cys Val
                           120
                                                125
Asn Asp Leu Val Leu Ile Leu Val Ala Gly Thr Leu Leu Ile Ala Pro
    130
                        135
                                            140
Phe Val Cys Ile Leu Met Ser Tyr Phe Tyr Ile Ala Leu Ala Ile Leu
                    150
                                        155
Arg Ile Asp Ser Pro Arg Gly Lys Gln Arg Ala Phe Ser Ser Cys Thr
               165
                                    170
                                                        175
Ser His Leu Ser Val Val Ser Leu Phe Tyr Ser Thr Ala Ile Gly Val
            180
                                185
                                                    190
Tyr Leu Cys Pro Pro Ser Ser His Ser Asp Gly Lys Asp Arg Val Phe
      195
                            200
                                                205
Ser Val Met Tyr Thr Val Val Thr Pro
   210
                        215
<210> 2535
<211> 156
<212> PRT
<213> Unknown (902317-dir-0-6 conceptual translation of range 5-472)
<400>2535
Cys His Pro Phe His Tyr Thr Met Ile Leu Thr Arg Met Leu Cys Val
```

```
Lys Met Val Val Met Cys His Ala Leu Ser His Leu His Ala Met Leu
                               25
His Thr Phe Leu Met Gly Gln Leu Ile Phe Cys Ala Asp Asn Arg Ile
Pro His Phe Phe Cys Asp Leu Tyr Ala Leu Met Lys Ile Ser Cys Thr
                        55
Ser Thr Tyr Leu Asn Thr Leu Met Ile His Thr Glu Gly Ala Val Val
Ile Ser Gly Ala Leu Ala Phe Ile Thr Ala Ser Tyr Ala Cys Ile Ile
                                    90
Leu Val Val Leu Arg Ile Pro Ser Ala Lys Gly Arg Trp Lys Thr Phe
                               105
                                                    110
Ser Thr Cys Gly Ser His Leu Thr Val Val Ala Ile Phe Tyr Gly Thr
                           120
                                               125
Leu Ser Trp Val Tyr Phe Arg Pro Leu Ser Ser Tyr Ser Val Thr Lys
                                            140
                       135
Gly Arg Ile Ile Thr Val Val Tyr Thr Val Val Thr
                    150
<210> 2536
<211> 215
<212> PRT
<213> Unknown (OST226-dir-0-8 conceptual translation of range 2-646)
<400>2536
Leu Thr Asp Ile Cys Phe Thr Ser Thr Thr Val Pro Lys Met Leu Gln
                                    10
Ile Ile Phe Ser Pro Thr Lys Val Ile Ser Tyr Thr Gly Cys Leu Ala
            20
                                25
Gln Thr Tyr Ser Ser Leu Leu Arg Arg His Glu Asn Phe Ile Leu Ala
                            40
Val Met Ala Tyr Asp Arg Tyr Ile Ala Ile Cys His Pro Phe His Tyr
                        55
Thr Met Ile Leu Thr Arg Met Leu Cys Val Lys Met Val Val Met Cys
                    70
                                        75
His Ala Leu Ser His Leu His Ala Met Leu His Thr Phe Leu Met Gly
               85
                                    90
Gln Leu Ile Phe Cys Ala Asp Asn Arg Ile Pro His Phe Phe Cys Asp
           100
                               105
Leu Tyr Ala Leu Met Lys Ile Ser Cys Thr Ser Thr Tyr Leu Asn Thr
                           120
                                                125
Leu Met Ile His Thr Glu Gly Ala Val Val Ile Ser Gly Ala Leu Ala
                                            140
                       135
Phe Ile Thr Ala Ser Tyr Ala Cys Ile Ile Leu Val Val Leu Arg Ile
                    150
                                        155
Pro Ser Ala Lys Gly Arg Trp Lys Thr Phe Ser Thr Arg Gly Ser His
                                    170
                165
Leu Thr Val Val Ala Ile Phe Tyr Gly Thr Leu Ser Trp Val Tyr Phe
                                185
                                                    190
Arg Pro Leu Ser Ser Tyr Ser Val Thr Lys Gly Arg Ile Ile Thr Val
      195
                            200
Val Tyr Thr Val Val Thr Pro
   210
                        215
<210> 2537
<211> 319
<212> PRT
<213> Unknown (4190944-dir-20-13 conceptual translation of range 2175-3131)
<220>
<221> VARIANT
```

<222> (1)...(319) <223> Xaa = Any Amino Acid <400>2537 Gln Gln Met Asp Asn Ser Asn Trp Thr Ser Val Ser His Phe Val Leu 5 Leu Gly Ile Ser Thr His Pro Glu Glu Gln Ile Pro Leu Phe Leu Val 25 Phe Ser Leu Met Tyr Ala Ile Asn Ile Ser Gly Asn Leu Ala Ile Ile 40 Thr Leu Ile Leu Ser Ala Pro Arg Leu His Ile Pro Met Tyr Ile Phe 55 60 Leu Ser Asn Leu Ala Leu Thr Asp Ile Cys Phe Thr Ser Thr Thr Val 70 75 Pro Lys Met Leu Gln Ile Ile Phe Ser Pro Thr Lys Val Ile Ser Tyr Thr Gly Cys Leu Ala Gln Thr Tyr Phe Phe Ile Cys Phe Ala Val Met 100 105 Glu Asn Phe Ile Leu Ala Val Met Ala Tyr Asp Arg Tyr Ile Ala Ile 120 125 Cys His Pro Phe His Tyr Thr Met Ile Leu Thr Arg Met Leu Cys Val 135 140 Lys Met Val Val Met Cys His Ala Leu Ser His Leu His Ala Met Leu 150 155 His Thr Phe Leu Ile Gly Gln Leu Ile Phe Cys Ala Asp Asn Arg Ile 170 Pro His Phe Phe Cys Asp Leu Tyr Ala Leu Met Lys Ile Ser Cys Thr 180 185 Ser Thr Tyr Leu Asn Thr Leu Met Ile His Thr Glu Gly Ala Val Val 195 200 205 Ile Ser Gly Ala Leu Ala Phe Ile Thr Ala Ser Tyr Ala Cys Ile Ile 215 220 Leu Val Val Leu Arg Ile Pro Ser Ala Lys Gly Arg Trp Lys Thr Phe 230 235 Ser Thr Cys Gly Ser His Leu Thr Val Val Ala Ile Phe Tyr Gly Thr 245 250 255 Leu Ser Trp Val Tyr Phe Arg Pro Leu Ser Ser Tyr Ser Val Thr Lys 260 265 270 Gly Arg Ile Ile Thr Val Val Tyr Thr Val Val Thr Pro Met Leu Asn 275 280 285 Pro Phe Ile Tyr Ser Leu Arg Asn Gly Asp Val Lys Gly Gly Phe Met 295 300 Lys Trp Met Ser Arg Met Gln Thr Phe Phe Arg Xaa Asn Pro 310 315 <210> 2538 <211> 326 <212> PRT <213> Unknown (4190944-dir-490-12 conceptual translation of range 49118-50095) <220> <221> VARIANT <222> (1)...(326) <223> Xaa = Any Amino Acid <400>2538 Ile Cys Tyr Ser Val Ser Leu Ser Leu Gly Glu Pro Thr Thr Met Gly 5 10 Arg Asn Asn Leu Thr Arg Pro Ser Glu Phe Ile Leu Leu Gly Leu Ser 20 25 30

```
Ser Arg Pro Glu Asp Gln Lys Pro Leu Phe Ala Val Phe Leu Pro Ile
                           40
Tyr Leu Ile Thr Val Ile Gly Asn Leu Leu Ile Ile Leu Ala Ile Arg
                        55
Ser Asp Thr Arg Leu Gln Thr Pro Met Tyr Phe Phe Leu Ser Ile Leu
                    70
Ser Phe Val Asp Ile Cys Tyr Val Thr Val Ile Ile Pro Lys Met Leu
                                    90
Val Asn Phe Leu Ser Glu Thr Lys Thr Ile Ser Tyr Gly Glu Cys Leu
           100
                                105
Thr Gln Met Tyr Phe Phe Leu Ala Phe Gly Asn Thr Asp Ser Tyr Leu
                           120
Leu Ala Ala Met Ala Ile Asp Arg Tyr Val Ala Ile Cys Asn Pro Phe
                       135
His Tyr Ile Thr Ile Met Ser His Arg Cys Cys Val Leu Leu Val
                   150
                                       155
Leu Ser Phe Cys Ile Pro His Phe His Ser Leu Leu His Ile Leu Leu
               165
                                   170
Thr Asn Gln Leu Ile Phe Cys Ala Ser Asn Val Ile His His Phe Phe
                               185
           180
Cys Asp Asp Gln Pro Val Leu Lys Leu Ser Cys Ser Ser His Phe Val
                           200
                                                205
        195
Lys Glu Ile Thr Val Met Thr Glu Gly Leu Ala Val Ile Met Thr Pro
                        215
                                            220
Phe Ser Cys Ile Ile Ile Ser Tyr Leu Arg Ile Leu Ile Thr Val Leu
                                        235
                    230
Lys Ile Pro Ser Ala Ala Gly Lys Arg Lys Ala Phe Ser Thr Cys Gly
                245
                                    250
Ser His Leu Thr Val Val Thr Leu Phe Tyr Gly Ser Ile Ser Tyr Val
            260
                                265
Tyr Phe Gln Pro Leu Ser Asn Tyr Thr Val Lys Asp Gln Ile Ala Thr
                            280
                                                285
Ile Ile Tyr Thr Val Leu Thr Pro Met Leu Asn Pro Phe Ile Tyr Ser
                       295
                                            300
Leu Arg Asn Lys Asp Met Lys Gln Gly Leu Ala Lys Leu Met His Arg
                    310
Met Lys Cys Gln Xaa Lys
                325
<210> 2539
<211> 214
<212> PRT
<213> Unknown (hg23-dir-0-8 conceptual translation of range 4-645)
<400>2539
Val Asp Ile Cys Tyr Val Thr Val Ile Ile Pro Lys Met Leu Val Asn
                                    1.0
Phe Leu Ser Glu Thr Lys Thr Ile Ser Tyr Ser Glu Cys Leu Thr Gln
                                25
Met Tyr Phe Phe Leu Ala Cys Gly Asn Thr Asp Ser Tyr Leu Leu Ala
                           40
Ala Met Ala Ile Asp Arg Tyr Val Ala Ile Cys Asn Pro Phe His Tyr
                        55
Ile Thr Ile Met Ser His Arg Cys Cys Val Leu Leu Leu Val Leu Ser
                    70
                                        75
Phe Cys Ile Pro His Leu His Ser Leu Leu His Ile Leu Leu Thr Asn
               85
                                    90
Gln Val Ile Phe Cys Ala Ser Asn Val Ile His His Phe Phe Cys Asp
                               105
Asp Gln Pro Val Leu Lys Leu Ser Cys Ser Ser His Phe Val Lys Glu
                            120
```

```
Ile Thr Val Met Thr Glu Gly Leu Ala Val Ile Met Thr Pro Phe Ser
                                           140
                    135
Cys Ile Ile Ile Ser Tyr Leu Arg Ile Leu Ile Thr Val Leu Lys Ile
                                       155
                   150
Pro Ser Ala Ala Gly Lys Arg Lys Ala Phe Ser Thr Cys Gly Ser His
                                   170
               165
Leu Thr Val Val Thr Leu Phe Tyr Gly Ser Ile Ser Tyr Leu Tyr Phe
           180
                               185
Gln Pro Leu Ser Asn Tyr Thr Val Lys Asp Gln Ile Ala Thr Ile Ile
                           200
Tyr Pro Val Leu Thr Pro
<210> 2540
<211> 316
<212> PRT
<213> Unknown (4190944-dir-624-13 conceptual translation of range 62576-
<400>2540
Met Gly Met Ser Asn Leu Thr Arg Leu Ser Glu Phe Ile Leu Leu Gly
                                    10
Leu Ser Ser Arg Ser Glu Asp Gln Arg Pro Leu Phe Ala Leu Phe Leu
                                25
           20
Ile Ile Tyr Leu Val Thr Leu Met Gly Asn Leu Leu Ile Ile Leu Ala
                            40
       35
Ile His Ser Asp Pro Arg Leu Gln Asn Pro Met Tyr Phe Phe Leu Ser
                        55
Ile Leu Ser Phe Ala Asp Ile Cys Tyr Thr Thr Val Ile Val Pro Lys
                   70
                                       75
Met Leu Val Asn Phe Leu Ser Glu Lys Lys Thr Ile Ser Tyr Ala Glu
                                   90
               85
Cys Leu Ala Gln Met Tyr Phe Phe Leu Val Phe Gly Asn Ile Asp Ser
           100
                                105
Tyr Leu Leu Ala Ala Met Ala Ile Asn Arg Cys Val Ala Ile Cys Asn
                            120
                                                125
Pro Phe His Tyr Val Thr Val Met Asn Arg Arg Cys Cys Val Leu Leu
                       135
                                           140
Leu Ala Phe Pro Ile Thr Phe Ser Tyr Phe His Ser Leu Leu His Val
                                       155
                   150
Leu Leu Val Asn Arg Leu Thr Phe Cys Thr Ser Asn Val Ile His His
                                   170
               165
Phe Phe Cys Asp Val Asn Pro Val Leu Lys Leu Ser Cys Ser Ser Thr
                                                    190
                               185
Phe Val Asn Glu Ile Val Ala Met Thr Glu Gly Leu Ala Ser Val Met
                           200
                                                205
       195
Ala Pro Phe Val Cys Ile Ile Ile Ser Tyr Leu Arg Ile Leu Ile Ala
                       215
                                            220
Val Leu Lys Ile Pro Ser Ala Ala Gly Lys His Lys Ala Phe Ser Thr
                   230
                                        235
Cys Ser Ser His Leu Thr Val Val Ile Leu Phe Tyr Gly Ser Ile Ser
                                    250
Tyr Val Tyr Leu Gln Pro Leu Ser Ser Tyr Thr Val Lys Asp Arg Ile
                                                    270
                                265
Ala Thr Ile Asn Tyr Thr Val Leu Thr Ser Val Leu Asn Pro Phe Ile
                           280
                                               285
       275
Tyr Ser Leu Arg Asn Lys Asp Met Lys Arg Gly Leu Gln Lys Leu Ile
                       295
Asn Lys Ile Lys Ser Gln Met Ser Arg Phe Ser Thr
                   310
```

```
<210> 2541
 <211> 327
<212> PRT
<213> Unknown (4190944-dir-1371-13 conceptual translation of range 137254-
138234)
<220>
<221> VARIANT
<222> (1)...(327)
<223> Xaa = Any Amino Acid
<400>2541
Arg Lys Ser Arg Asp Met Glu Ile Lys Asn Tyr Ser Ser Ser Thr Ser
 1
                 5
                                   10
Gly Phe Ile Leu Gly Leu Ser Ser Asn Pro Gln Leu Gln Lys Pro
                                 25
Leu Phe Ala Ile Phe Leu Ile Met Tyr Leu Leu Ala Ala Val Gly Asn
                            40
Val Leu Ile Ile Pro Ala Ile Tyr Ser Asp Pro Arg Leu His Thr Pro
Met Tyr Phe Phe Leu Ser Asn Leu Ser Phe Met Asp Ile Cys Phe Thr
Thr Val Ile Val Pro Lys Met Leu Val Asn Phe Leu Ser Glu Thr Lys
                                    90
Val Ile Ser Tyr Val Gly Cys Leu Ala Gln Met Tyr Phe Phe Met Ala
            100
                                105
Phe Gly Asn Thr Asp Ser Tyr Leu Leu Ala Ser Met Ala Ile Asp Arg
                            120
                                                 125
Leu Val Ala Ile Cys Asn Pro Leu His Tyr Asp Val Val Met Lys Pro
                        135
                                            140
Arg His Cys Leu Leu Met Leu Leu Gly Ser Cys Ser Ile Ser His Leu
                                        155
His Ser Leu Phe Arg Val Leu Leu Met Ser Arg Leu Ser Phe Cys Ala
                165
                                    170
Ser His Ile Lys His Phe Phe Cys Asp Thr Gln Pro Val Leu Lys
            180
                                185
Leu Ser Cys Ser Asp Thr Ser Ser Ser Gln Met Val Val Met Thr Glu
                            200
                                                205
Thr Leu Ala Val Ile Val Thr Pro Phe Leu Cys Ile Ile Phe Ser Tyr
                        215
                                            220
Leu Arg Ile Met Val Thr Val Leu Arg Ile Pro Ser Ala Ala Gly Lys
                    230
                                        235
Trp Lys Ala Phe Ser Thr Cys Gly Ser His Leu Thr Ala Val Ala Leu
                                    250
Phe Tyr Gly Ser Ile Ile Tyr Val Tyr Phe Arg Pro Leu Ser Met Tyr
            260
                                265
Ser Val Val Arg Asp Arg Val Ala Thr Val Met Tyr Thr Val Val Thr
                            280
                                                285
Pro Met Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys
                        295
                                            300
Arg Gly Leu Lys Lys Leu Gln Asp Arg Ile Tyr Arg Xaa Lys Glu Gln
                    310
                                        315
Asn Val Gly Val Ser Xaa Leu
                325
<210> 2542
<211> 216
<212> PRT
<213> Unknown (hg16-dir-0-8 conceptual translation of range 1-648)
```

1544

<400>2542

```
Phe Met Asp Ile Cys Phe Thr Thr Val Ile Val Pro Lys Met Leu Val
Asn Phe Leu Ser Glu Thr Lys Val Ile Ser Tyr Val Gly Cys Leu Ala
                               25
Gln Met Tyr Phe Phe Met Ala Phe Gly Asn Thr Asp Ser Tyr Leu Leu
                                                45
                           40
Ala Ser Met Ala Ile Asp Arg Leu Val Ala Ile Cys Asn Pro Leu His
                       55
Tyr Asp Val Val Met Lys Pro Arg His Cys Leu Leu Met Leu Leu Gly
Ser Tyr Ser Ile Ser His Leu His Ser Leu Phe Arg Val Leu Leu Met
                                    90
Ser Arg Leu Ser Phe Cys Ala Ser His Ile Ile Lys His Phe Phe Cys
                               105
           100
Asp Thr Gln Pro Val Leu Lys Leu Ser Cys Ser Asp Thr Ser Ser Ser
                           120
                                               125
       115
Gln Met Val Val Met Thr Glu Thr Leu Ala Val Ile Val Thr Pro Phe
                       135
                                            140
Leu Cys Thr Ile Phe Ser Tyr Leu Gln Ile Ile Val Thr Val Leu Arg
                                        155
                   150
Ile Pro Ser Ala Ala Arg Lys Trp Lys Ala Phe Ser Thr Cys Gly Ser
                                                        175
                                    170
               165
His Leu Thr Ala Val Ala Leu Phe Tyr Gly Ser Ile Ile Tyr Val Tyr
                                                    190
          180
                               185
Phe Arg Pro Leu Ser Met Tyr Ser Val Val Arg Asp Arg Val Ala Thr
                                                205
                            200
Val Met Tyr Thr Val Val Thr Pro
    210
<210> 2543
<211> 323
<213> Unknown (4190944-dir-1112-13 conceptual translation of range 111405-
112373)
<220>
<221> VARIANT
<222> (1) ... (323)
<223> Xaa = Any Amino Acid
<400>2543
Arg Asp Met Glu Thr Lys Asn Tyr Ser Ser Ser Thr Ser Gly Phe Ile
                5
                               10
Leu Leu Gly Leu Ser Ser Asn Pro Lys Leu Gln Lys Pro Leu Phe Ala
                               25
Ile Phe Leu Ile Met Tyr Leu Leu Thr Ala Val Gly Asn Val Leu Ile
Ile Leu Ala Ile Tyr Ser Asp Pro Arg Leu His Thr Pro Met Tyr Phe
                        55
Phe Leu Ser Asn Leu Ser Phe Met Asp Ile Cys Phe Thr Thr Val Ile
                                        75
                    70
Val Pro Lys Met Leu Val Asn Phe Leu Ser Glu Thr Lys Ile Ile Ser
                                    90
               85
Tyr Val Gly Cys Leu Ile Gln Met Tyr Phe Phe Met Ala Phe Gly Asn
           100
                               105
Thr Asp Ser Tyr Leu Leu Ala Ser Met Ala Ile Asp Arg Leu Val Ala
                           120
                                                125
Ile Cys Asn Pro Leu His Tyr Asp Val Val Met Lys Pro Trp His Cys
                       135
                                            140
Leu Leu Met Leu Leu Gly Ser Cys Ser Ile Ser His Leu His Ser Leu
                    150
                                                            160
```

```
Phe Arg Val Leu Leu Met Ser Arg Leu Ser Phe Cys Ala Ser His Ile
                      170
                165
Ile Lys His Phe Phe Cys Asp Thr Gln Pro Val Leu Lys Leu Ser Cys
                               185
           180
Ser Asp Thr Ser Ser Ser Gln Met Val Val Met Thr Glu Thr Leu Ala
                           200
Val Ile Val Thr Pro Phe Leu Cys Thr Ile Phe Ser Tyr Leu Gln Ile
                       215
Ile Val Thr Val Leu Arg Ile Pro Ser Ala Ala Gly Lys Trp Lys Ala
                   230
                                       235
Phe Ser Thr Cys Gly Ser His Leu Thr Val Val Val Leu Phe Tyr Gly
                                   250
                245
Ser Val Ile Tyr Val Tyr Phe Arg Pro Leu Ser Met Tyr Ser Val Met
            260
                               265
                                                   270
Lys Gly Arg Val Ala Thr Val Met Tyr Thr Val Val Thr Pro Met Leu
                           280
Asn Pro Phe Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys Arg Gly Leu
                                           300
                       295
Lys Lys Leu Arg His Arg Ile Tyr Ser Xaa Lys Glu Gln Asn Val Gly
                                       315
                    310
Met Ser Lys
<210> 2544
<211> 216
<212> PRT
<213> Unknown (OST046-dir-0-8 conceptual translation of range 2-649)
Phe Met Asp Ile Cys Phe Thr Thr Val Ile Val Pro Lys Met Leu Val
                5
                                    10
Asn Phe Leu Ser Glu Thr Lys Ile Ile Ser Tyr Val Gly Cys Leu Val
                               25
           20
Gln Met Tyr Phe Phe Met Ala Phe Gly Asn Thr Asp Ser Tyr Leu Leu
                           40
Ala Ser Met Ala Ile Asp Arg Leu Val Ala Ile Cys Asn Pro Leu His
                                            60
Tyr Asp Val Val Met Lys Pro Trp His Cys Leu Leu Met Leu Leu Gly
                    70
                                       75
Ser Cys Ser Ile Ser His Leu His Ser Leu Phe Arg Val Leu Leu Met
               85
                                    90
Ser Arg Leu Ser Phe Cys Ala Ser His Ile Ile Lys His Phe Phe Cys
                               105
            100
Asp Thr Gln Pro Val Leu Lys Leu Ser Cys Ser Asp Thr Ser Ser Ser
                           120
       115
Gln Met Val Val Met Thr Glu Thr Leu Ala Val Ile Val Thr Pro Phe
                       135
Leu Cys Thr Ile Phe Ser Tyr Leu Gln Ile Ile Val Thr Val Leu Arg
                                       155
                   150
Ile Pro Ser Ala Ala Arg Lys Trp Lys Ala Phe Ser Thr Cys Gly Ser
                                   170
His Leu Thr Val Val Val Leu Phe Tyr Gly Ser Val Ile Tyr Val Tyr
                               185
                                                   190
Phe Arg Pro Leu Ser Met Tyr Ser Val Met Lys Gly Arg Val Ala Thr
                           200
Val Met Tyr Thr Val Val Thr Pro
<210> 2545
<211> 216
<212> PRT
```

1546

<213> Unknown (p100-dir-0-8 conceptual translation of range 2-649) <400>2545 Leu Val Asp Leu Cys Phe Thr Thr Val Ile Val Pro Gln Met Leu Val 10 Ser Met Leu Met Gln Asn Lys Ala Ile Ser Phe Ala Gln Cys Ile Ala 20 25 Gln Met Tyr Phe Phe Val Ala Phe Gly Ile Thr Asp Ser Phe Leu Leu 40 45 Ala Ala Met Pro Ile Asp Arg Tyr Met Ala Ile Cys Asn Pro Leu His 55 60 Tyr Thr Thr Met Ser Pro Arg Arg Cys Val Leu Leu Val Ala Met 65 70 75 Ser Trp Val Val Ser His Phe His Ser Leu Val His Thr Leu Leu Met 90 Ala Arg Leu Ser Phe Cys Gly Pro Asn Ala Ile His His Phe Phe Cys 105 Asp Val Gln Pro Leu Leu Thr Leu Ser Cys Ser Asp Thr Ser Ile Asn 120 125 Glu Val Leu Ala Phe Thr Glu Gly Ser Leu Val Ile Met Ser Pro Phe 135 140 Leu Phe Ile Val Ile Ser Tyr Val Trp Ile Thr Arg Ala Val Leu Arg 150 155 Val Pro Ser Gly Arg Gly Arg Tyr Lys Ala Phe Ser Thr Cys Ser Ser 165 170 His Ile Thr Val Val Val Leu Phe Tyr Gly Thr Ile Val Ser Val Tyr 180 185 Ile Arg Pro Ser Ser Thr Tyr Ser Val Thr Lys Asp Arg Val Val Thr 195 200 205 Val Ile Tyr Thr Val Val Thr Pro 210 <210> 2546 <211> 328 <212> PRT <213> Unknown (4190944-rev-159-13 conceptual translation of range 16099-<220> <221> VARIANT <222> (1)...(328) <223> Xaa = Any Amino Acid <400>2546 Phe Gln Ala Gly Xaa Leu Ser Leu Met Met Ser Phe Ala Pro Asn Ala Ser His Ser Pro Val Phe Leu Leu Gly Phe Ser Arg Ala Asn Ile 20 25 Ser Tyr Thr Leu Leu Phe Phe Leu Phe Leu Ala Ile Tyr Leu Thr Thr 40 Ile Leu Gly Asn Val Thr Leu Val Leu Leu Ile Ser Trp Asp Ser Arg 55 60 Leu His Ser Pro Met Tyr Tyr Leu Leu Arg Gly Leu Ser Val Ile Asp 70 75 Met Gly Leu Ser Thr Val Thr Leu Pro Gln Leu Leu Ala His Leu Val 85 90 Ser His Tyr Pro Thr Ile Pro Ala Ala Arg Cys Leu Ala Gln Phe Phe 100 105 Phe Phe Tyr Ala Phe Gly Val Thr Asp Thr Leu Val Ile Ala Val Met 115 120 125 Ala Leu Asp Arg Tyr Val Ala Ile Cys Asp Pro Leu His Tyr Ala Leu

```
135
                                            140
Val Met Asn His Gln Arg Cys Ala Cys Leu Leu Ala Leu Ser Trp Val
                  150
                                       155
Val Ser Ile Leu His Thr Met Leu Arg Val Gly Leu Val Leu Pro Leu
                                   170
Cys Trp Thr Gly Asp Ala Gly Gly Asn Val Asn Leu Pro His Phe Phe
                               185
Cys Asp His Arg Pro Leu Leu Arg Ala Ser Cys Ser Asp Ile His Ser
                           200
                                                205
Asn Glu Leu Ala Ile Phe Phe Glu Gly Gly Phe Leu Met Leu Gly Pro
                                           220
                       215
Cys Ala Leu Ile Val Leu Ser Tyr Val Arg Ile Gly Ala Ala Ile Leu
                   230
                                       235
Arg Leu Pro Ser Ala Ala Gly Arg Arg Arg Ala Val Ser Thr Cys Gly
                                    250
               245
Ser His Leu Thr Met Val Gly Phe Leu Tyr Gly Thr Ile Ile Cys Val
                              · 265
           260
Tyr Phe Gln Pro Pro Phe Gln Asn Ser Gln Tyr Gln Asp Met Val Ala
                           280
Ser Val Met Tyr Thr Ala Ile Thr Pro Leu Ala Asn Pro Phe Val Tyr
                       295
Ser Leu His Asn Lys Asp Val Lys Gly Ala Leu Cys Arg Leu Leu Glu
                   310
                                       315
Trp Val Lys Val Asp Pro Xaa Leu
               325
<210> 2547
<211> 216
<212> PRT
<213> Unknown (hg99-dir-0-8 conceptual translation of range 1-648)
<400>2547
Phe Ala Asp Leu Cys Phe Ala Ser Val Thr Val Pro Lys Met Leu Asp
                                    10
Asn Leu Leu Ala His Asp His Ser Ile Ser Leu Ala Gly Cys Leu Thr
           20
                               25
Gln Met Tyr Phe Phe Phe Ala Leu Gly Val Thr Asp Ser Cys Leu Leu
                           40
Ala Asp Met Ala Tyr Asp Cys Tyr Val Asp Ile Arg His Pro Leu Pro
                       55
Tyr Asp Thr Arg Met Ser Arg Ala Met Cys Ala Ala Leu Val Gly Met
Ala Trp Val Val Ser His Val His Ser Leu Leu Tyr Ile Leu Leu Met
                                    90
Ala Arg Leu Ser Phe Cys Ala Ser His Gln Val Pro His Phe Phe Cys
                               105
Asp His Gln Pro Leu Leu Arg Leu Ser Cys Ser Asp Asn His His Ile
                                               125
                           120
Gln Leu Leu Ile Phe Thr Glu Gly Ala Ala Val Val Thr Pro Phe
                                            140
                       135
Leu Leu Ile Leu Ala Ser Tyr Gly Ala Ile Ala Ala Val Leu Gln
                                        155
                   150
Leu Pro Ser Ala Ser Gly Arg Leu Arg Ala Val Ser Thr Cys Gly Ser
                                   170
               165
His Leu Ala Val Val Ser Leu Phe Tyr Gly Thr Val Ile Ala Val Tyr
                               185
Phe Gln Ala Thr Ser Arg Arg Glu Ala Glu Trp Gly Arg Val Ala Thr
                           200
Val Met Tyr Thr Val Val Thr Pro
```

```
<210> 2548
<211> 319
<212> PRT
<213> Unknown (p16-dir-0-11 conceptual translation of range 1-960)
<400>2548
Met Ala Pro Thr Asn Leu Thr Ser Ala Pro Val Phe Leu Leu Gly
Leu Val Thr Glu Gln Thr Asp Ala His Pro Leu Leu Phe Leu Leu Cys
                                25
Leu Gly Ile Tyr Leu Leu Asn Ala Leu Ser Asn Leu Ser Met Val Ala
                            40
Leu Val Arg Ser Asp Gly Ala Leu Arg Ser Pro Met Tyr Tyr Phe Leu
                       55
                                           60
Gly His Leu Ser Leu Val Asp Val Cys Phe Thr Thr Val Thr Val Pro
                   70
                                       75
Arg Leu Leu Ala Gly Leu Leu His Pro Gly Gln Ala Ile Ser Phe Gln
                                   90
Ala Cys Phe Ala Glu Met Tyr Phe Phe Val Ala Leu Gly Ile Thr Glu
                               105
          100
Ser Tyr Leu Pro Ala Ala Met Ser Tyr Asp Arg Ala Thr Ala Ala Cys
                           120
                                                125
       115
Arg Pro Leu Arg Tyr Gly Ala Leu Val Thr His Gly Arg Cys Ala Ser
                                           140
                       135
Leu Val Arg Ala Ser Trp Ala Val Thr His Leu His Ser Leu Leu His
                                       155
                   150
Thr Leu Leu Ser Ala Leu Ser Tyr Pro Tyr Pro Thr Pro Val Arg
                                   170
               165
Pro Phe Phe Cys Asp Met Thr Val Met Leu Ser Leu Ala Thr Ser Asp
                               185
                                                   190
Thr Ser Ala Ala Glu Thr Ala Ile Phe Ser Glu Gly Leu Ala Val Val
                           200
                                                205
Leu Ala Pro Leu Leu Leu Val Phe Leu Ser Tyr Ala Arg Ile Leu Val
                       215
                                            220
Ala Val Leu Gly Leu Pro Arg Pro Arg Arg Ala Phe Ser Thr Cys Gly
                   230
                                       235
Ala His Leu Val Ala Val Ala Val Ala Val Ala Leu Phe Phe Gly Ser
                                   250
               245
Val Leu Ser Val Tyr Phe Pro Pro Ser Ser Ala Tyr Ser Ala Arg Tyr
                               265
                                                    270
           260
Asp Arg Leu Ala Ser Val Val Tyr Ala Val Ile Thr Pro Thr Leu Asn
                           280
                                                285
Pro Phe Ile Asn Ser Leu Arg Asn Lys Glu Val Lys Gly Ala Leu Lys
                     295
                                           300
Arg Gly Leu Arg Trp Arg Ala Ala Pro Gln Glu Ala Trp Arg Ala
                   310
<210> 2549
<211> 158
<212> PRT
<213> Unknown (2564509-dir-0-6 conceptual translation of range 1-474)
<400>2549
Ile Cys Ser Pro Leu His Tyr Gly Met Val Met Ser Arg Arg Met Cys
                                    10
Phe Cys Leu Val Ala Ile Ser Trp Leu Val Ile Ala Val His Ser Val
           20
                               25
Leu His Ser Val Leu Thr Ser Arg Leu Ser Phe Cys Gly Ser Asn Gln
                                               45
                           40
Ile His His Phe Phe Cys Asp Met Thr Pro Leu Leu Lys Leu Ser Cys
```

```
Ser Asp Thr Ser Val Asn Glu Leu Val Ile Phe Ile Glu Gly Pro Phe
                   70
Ser Val Ala Val Pro Leu Gly Ile Val Leu Val Ser Tyr Val Arg Ile
Ile Ser Ala Ile Leu Lys Ile Arg Ser Pro Glu Gly Arg His Arg Ala
                               105
           100
Phe Ser Thr Cys Ser Ser His Leu Met Val Val Ile Leu Tyr Phe Gly
                           120
                                                125
       115
Thr Ile Ile Phe Met Tyr Phe Arg Pro Thr Ser Ser Tyr Ser Leu Asp
                                           140
                       135
Tyr Asp Arg Val Val Ser Val Met Tyr Thr Val Val Ala Pro
                   150
<210> 2550
<211> 156
<212> PRT
<213> Unknown (2564511-dir-0-6 conceptual translation of range 1-468)
<400>2550
Asn Pro Leu His Tyr Thr Thr Val Met Ser Lys Lys Val Cys Leu Leu
Leu Val Gly Met Leu Trp Leu Trp Ala Val Leu Tyr Ser Leu Met His
                                25
            20
Ile Val Leu Ile Ser Arg Leu Ser Phe Cys Gly Ser Asn Gln Ile Asn
                            40
His Phe Val Cys Asp Thr Val Pro Leu Phe Lys Leu Ser Cys Ser Asp
                        55
Thr Ser Thr Asn Gln Leu Val Ile Phe Thr Val Gly Ser Leu Ile Val
                                        75
                    70
Met Val Pro Phe Leu Ile Val Leu Ile Ser Tyr Ala Arg Ile Val Phe
                                    90
                85
Ala Ile Leu Lys Ile Ser Ser Thr Asp Gly Arg Arg Lys Thr Phe Ser
            100
                                105
Thr Cys Ser Ser His Leu Thr Val Val Thr Leu Tyr Phe Gly Thr Ile
                                                125
                            120
Met Phe Met Tyr Phe Arg Pro Ser Ser Ser Tyr Ser Leu Thr Lys Asp
                                            140
                       135
Arg Val Ala Ser Val Met Tyr Thr Val Leu Ala Pro
                    150
<210> 2551
<211> 158
<212> PRT
<213> Unknown (2564513-dir-0-6 conceptual translation of range 1-474)
<400>2551
Ile Cys Asp Pro Leu Arg Tyr Thr Val Val Met Ser Lys Arg Ile Cys
                                    10
Leu Gln Met Val Ala Gly Ser Trp Val Leu Val Ser Leu His Ser Leu
                                25
Leu His Thr Val Leu Thr Ala Arg Leu Ser Phe Cys Gly Arg Asn Leu
Ile Arg His Phe Phe Cys Glu Met Ser Pro Leu Phe Ala Leu Ser Cys
                                           60
                        55
Ser Asp Thr Thr Thr Asn Glu Leu Val Ile Phe Thr Glu Gly Ser Phe
                                        75
                    70
Ser Leu Ala Leu Pro Phe Leu Leu Ile Leu Phe Ser Tyr Leu Arg Ile
                85
                                    90
Leu Ser Thr Val Leu Arg Ile Arg Ser Val Asp Gly Lys Cys Arg Ala
                                105
Phe Ser Thr Cys Ser Ser His Leu Thr Val Val Ala Leu Phe Tyr Gly
```

```
115
                             120
                                                 125
 Thr Leu Phe Ser Val Tyr Phe Arg Pro Ser Ser His Ser Leu Asp
                        135
                                             140
 Asn Asp Arg Val Val Ser Ile Met Tyr Thr Ala Ile Thr Pro
                     150
 <210> 2552
 <211> 315
 <212> PRT
 <213> Unknown (4808260-rev-1059-13 conceptual translation of range 106061-
 107005)
 <220>
 <221> VARIANT
 <222> (1)...(315)
 <223> Xaa = Any Amino Acid
 <400>2552
 Cys Leu Leu Ser Glu Val Met Leu Asn Thr Thr Ser Val Thr Glu Phe
                                     10
 Leu Leu Gly Val Thr Asp Ile Gln Glu Leu Gln Pro Phe Leu Phe
            20
                                 25
 Val Val Phe Leu Thr Ile Tyr Phe Ile Ser Val Thr Gly Asn Gly Ala
                            40
                                                 45
 Val Leu Met Ile Val Ile Ser Asp Pro Arg Leu His Ser Leu Met Tyr
                        55
                                             60
 Phe Phe Leu Gly Asn Leu Ser Tyr Leu Asp Ile Cys Tyr Ser Thr Val
                     70
                                         75
 Thr Leu Pro Lys Met Leu Gln Asn Phe Leu Ser Thr His Lys Ala Ile
                85
                                     90
 Ser Phe Leu Gly Cys Ile Ser Gln Leu His Phe Phe His Phe Leu Gly
            100
                                105
 Ser Thr Glu Ser Met Leu Phe Ala Val Met Ala Phe Asp Leu Ser Val
                           120
                                                125
Ala Ile Cys Lys Pro Leu Arg Tyr Thr Val Ile Met Asn Pro Gln Leu
                        135
                                            140
Cys Thr Gln Met Ala Ile Thr Ile Trp Val Ile Gly Phe Phe His Ala
                    150
                                        155
Leu Leu His Ser Val Met Thr Ser Arg Leu Asn Phe Cys Gly Ser Asn
                165
                                    170
Arg Ile His His Phe Leu Cys Asp Ile Lys Pro Leu Leu Lys Leu Ala
                                185
                                                    190
Cys Gly Asn Thr Glu Leu Asn Gln Trp Leu Leu Ser Thr Val Thr Gly
                            200
                                                205
Thr Ile Ala Met Gly Pro Phe Phe Leu Thr Leu Leu Ser Tyr Phe Tyr
                        215
Ile Ile Thr Tyr Leu Phe Phe Lys Thr Arg Ser Cys Ser Met Leu Cys
                    230
                                        235
Lys Ala Leu Ser Thr Cys Ala Ser His Phe Met Val Val Ile Leu Phe
                                    250
Tyr Ala Pro Val Leu Phe Thr Tyr Ile His Pro Ala Leu Glu Ser Phe
            260
                                265
                                                    270
Met Asp Gln Asp Arg Ile Val Ala Ile Met Tyr Thr Val Val Thr Pro
                            280
                                                285
Val Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Lys Glu Val Lys Gly
                       295
Ala Leu Gly Arg Val Ile Arg Arg Leu Xaa Phe
                    310
<210> 2553
<211> 162
```

1551

```
<212> PRT
<213> Unknown (1617234-dir-0-6 conceptual translation of range 1-486)
<400>2553
Asn Ala Ile Cys Asn Pro Leu Leu Tyr Asn Thr Ile Met Asn Lys Arg
                                    10
               5
Thr Cys Val Ile Leu Ile Val Gly Ser Trp Leu Ile Ala Ser Ile Asn
                                25
            20
Ser Leu Ile His Thr Ile Leu Thr Phe Met Leu Pro Phe Cys Gly Ser
                            40
Asn Ala Ile Asp Ser Phe Phe Cys Asp Met Pro Pro Leu Leu Lys Leu
                        55
Ala Cys Thr Asp Thr Leu Val Asn Gln Ile Val Ile Phe Val Thr Gly
                    70
Ser Cys Ile Ile Ala Gly Pro Phe Met Leu Thr Val Phe Ser Tyr Val
                                                        95
                                    90
Gln Ile Ile Ser Thr Ile Val Ser Ile Arg Ser Ser Ser Arg Lys Lys
                                105
                                                    110
            100
Lys Ala Phe Ser Thr Cys Thr Ser His Ile Thr Ala Val Val Ile Phe
                                               125
                            120
Tyr Val Pro Ser Ile Cys Ile Tyr Phe Arg Pro Lys Ser Asn Gln Ala
                                            140
                        135
Met Ile Gln Asp Lys Met Ala Thr Val Ile Cys Ala Val Ile Thr Pro
                    150
Leu Leu
<210> 2554
<211> 160
<212> PRT
<213> Unknown (4877310-dir-0-6 conceptual translation of range 2-481)
Ala Ala Ile Cys Lys Pro Leu His Tyr Asn Thr Ile Met Asn Lys Arg
                                    10
Leu Cys Val Cys Leu Ala Leu Gly Cys Trp Gly Val Gly Val Ile Asn
                                25
            20
Ser Thr Ile His Val Phe Phe Thr Phe Gln Leu Pro Phe Cys Arg Ser
                            40
Arg His Ile Asn His Phe Phe Cys Glu Val Pro Pro Phe Phe Arg Leu
                                            60
Ser Cys Gln Asp Thr Trp Phe Asn Glu Leu Ala Met Tyr Ile Ser Ala
                    70
Cys Ile Ile Ala Ile Cys Ala Phe Phe Leu Thr Leu Ile Ser Tyr Ile
                                    90
Tyr Ile Ile Ser Ser Ile Ala Lys Ile Arg Ala Pro Gln Gly Arg Tyr
                                105
            100
Lys Ala Phe Ser Thr Cys Ala Ser His Leu Thr Val Val Ala Val Tyr
                            120
        115
Tyr Gly Thr Ile Met Phe Ile Tyr Leu His Pro His Ser Ala Tyr Ser
                       135
                                            140
Pro Glu Met Gly Lys Ile Val Ser Ile Ile Tyr Thr Ser Val Thr Pro
                    150
145
<210> 2555
<211> 160
<212> PRT
<213> Unknown (4877337-dir-0-6 conceptual translation of range 2-481)
Ile Cys Ser Pro Leu Leu Tyr Phe Thr Lys Met Ser Thr Arg Val Tyr
```

```
10
Val Gln Leu Leu Thr Val Ala Tyr Val Gly Gly Phe Leu Asn Ala Cys
                                25
            20
Ser Phe Thr Ile Cys Phe Tyr Tyr Leu Leu Leu Cys Gly Pro Asn Arg
                            40
Val Asn His Phe Phe Cys Asp Phe Ala Pro Leu Val Glu Phe Ser Cys
                       55
Ser Asp Ile Ser Ile Pro Ala Val Val Pro Ser Phe Thr Ala Gly Ser
Ile Ile Val Val Thr Val Ile Val Ile Ala Ile Ser Tyr Ile Tyr Ile
                                    90
                                                        95
Leu Ile Thr Ile Leu Lys Met Arg Ser Thr Glu Gly His His Lys Ala
                                105
                                                    110
           100
Phe Ser Thr Cys Thr Ser His Leu Thr Ala Val Thr Leu Phe Tyr Gly
                           120
        115
                                                125
Thr Ile Thr Leu Ile Tyr Val Met Pro Lys Ser Ser Phe Ser Thr Asp
                                            140
                       135
Gln Asn Lys Val Val Cys Val Phe Tyr Thr Val Val Ile Pro Met Leu
                    150
<210> 2556
<211> 315
<212> PRT
<213> Unknown (4680263-dir-1-12 conceptual translation of range 259-1203)
<220>
<221> VARIANT
<222> (1)...(315)
<223> Xaa = Any Amino Acid
<400>2556
Glu Met Glu Pro Gly Asn Tyr Thr Val Val Thr Glu Phe Ile Leu Leu
1
                                    10
Gly Leu Thr Asp Asp Ile Thr Val Ser Val Ile Leu Phe Val Met Phe
Leu Ile Val Tyr Ser Val Thr Leu Met Gly Asn Leu Asn Ile Ile Val
                            40
Leu Ile Arg Thr Ser Pro Gln Leu His Thr Pro Met Tyr Leu Phe Leu
                       55
Ser His Leu Ala Phe Leu Asp Ile Gly Tyr Ser Ser Ser Val Thr Pro
                   70
                                        75
Ile Met Leu Arg Gly Phe Leu Arg Lys Gly Thr Phe Ile Pro Val Ala
                                   90
Gly Cys Val Ala Gln Leu Cys Ile Val Val Ala Phe Gly Thr Ser Glu
           100
                               105
Ser Phe Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys
                           120
                                                125
Ser Pro Leu Leu Tyr Ser Thr Gln Met Ser Ser Thr Val Cys Ile Leu
                       135
                                            140
Leu Val Gly Thr Ser Tyr Leu Gly Gly Trp Val Asn Ala Trp Ile Phe
                                        155
                   150
Thr Gly Cys Ser Leu Asn Leu Ser Phe Cys Gly Pro Asn Lys Ile Asn
               165
                                    170
His Phe Phe Cys Asp Tyr Ser Pro Leu Leu Lys Leu Ser Cys Ser His
                                                    190
           180
                                185
Asp Phe Ser Phe Glu Val Ile Pro Ala Ile Ser Ser Gly Ser Ile Ile
                           200
                                                205
Val Val Thr Val Phe Ile Ile Ala Leu Ser Tyr Val Tyr Ile Leu Val
                       215
                                            220
Ser Ile Leu Lys Met Arg Ser Thr Glu Gly Arg Gln Lys Ala Phe Ser
                   230
                                        235
```

```
Thr Cys Thr Ser His Leu Thr Ala Val Thr Leu Phe Phe Gly Thr Ile
                245
                        250
Thr Phe Ile Tyr Val Met Pro Gln Ser Ser Tyr Ser Thr Asp Gln Asn
            260
                                265
Lys Val Val Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro
                            280
Leu Ile Tyr Ser Phe Arg Asn Lys Glu Val Lys Glu Ala Met Lys Lys
                        295
Leu Ile Ala Lys Thr His Trp Trp Ser Xaa Asn
                    310
<210> 2557
<211> 312
<212> PRT
<213> Unknown (1246533-dir-0-11 conceptual translation of range 1-936)
Met Ala Glu Gly Asn His Thr Leu Ala Ser Glu Phe Ile Leu Val Gly
                 5
Leu Ser Asp His Pro Lys Met Lys Ala Ala Leu Phe Val Val Phe Leu
            20
                                25
Leu Ile Tyr Val Ile Thr Phe Gln Gly Asn Leu Gly Ile Ile Ile Leu
        35
                            40
Ile Gln Gly Asp Pro Arg Leu His Thr Ser Met Tyr Phe Phe Leu Ser
                        55
                                            60
Ser Leu Ser Val Val Asp Ile Cys Phe Ser Ser Val Ile Ala Pro Arg
                    70
                                        75
Thr Leu Val Asn Phe Leu Ser Glu Arg Arg Thr Ile Ser Phe Thr Gly
                                   90
Cys Thr Gly Gln Thr Phe Phe Tyr Ile Val Phe Val Thr Thr Glu Cys
           100
                               105
Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                            120
                                                125
Pro Leu Leu Tyr Ser Thr Ile Met Thr Arg Arg Gln Cys Met Gln Leu
                        135
                                           140
Val Val Gly Ser Tyr Ile Gly Gly Ile Leu Asn Ala Ile Ile Gln Thr
                   150
                                       155
Thr Phe Ile Ile Arg Leu Pro Phe Cys Gly Ser Asn Ile Ile Asn His
                165
                                   170
Phe Phe Cys Asp Val Pro Pro Leu Leu Ala Leu Ser Leu Ala Ser Thr
            180
                                185
Tyr Ile Ser Glu Met Ile Leu Phe Ser Leu Ala Gly Ile Ile Glu Leu
                            200
Ser Thr Val Thr Ser Ile Leu Val Ser Tyr Ile Phe Ile Ser Cys Ala
                       215
                                           220
Ile Leu Arg Ile Arg Ser Ala Glu Gly Arg Gln Lys Ala Leu Ser Thr
                   230
                                       235
Cys Ala Ser His Leu Thr Ala Val Thr Leu Leu Tyr Gly Thr Thr Ile
               245
                                   250
Phe Thr Tyr Leu Arg Pro Ser Ser Ser Tyr Ser Leu Asn Thr Asp Lys
                               265
Val Val Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu
                           280
                                               285
Ile Tyr Ser Leu Arg Asn Gln Glu Val Lys Gly Ala Leu Ser Arg Val
                       295
Val Glu Arg Ile Thr Val Arg Val
<210> 2558
<211> 313
<212> PRT
```

```
<213> Unknown (p28-dir-0-11 conceptual translation of range 1-939)
<400>2558
Met Glu Gly Lys Asn Leu Thr Ser Ile Ser Glu Cys Phe Leu Leu Gly
Phe Ser Glu Gln Leu Glu Gln Lys Pro Leu Phe Gly Ser Phe Leu
Phe Met Tyr Leu Val Thr Val Ala Gly Asn Leu Leu Ile Ile Leu Val
                            40
Ile Ile Thr Asp Thr Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ala
                        55
                                            60
Asn Leu Ser Leu Ala Asp Ala Cys Phe Val Ser Thr Thr Val Pro Lys
                    70
                                        75
Met Leu Ala Asn Ile Gln Ile Gln Ser Gln Ala Ile Ser Tyr Ser Gly
                                    90
                85
Cys Leu Leu Gln Leu Tyr Phe Phe Met Leu Phe Val Met Leu Glu Ala
            100
                                105
Phe Leu Leu Ala Val Met Ala Tyr Asp Cys Tyr Val Ala Ile Cys His
                            120
Pro Leu His Tyr Ile Leu Ile Met Ser Pro Gly Leu Cys Ile Phe Leu
                        135
                                            140
Val Ser Ala Ser Trp Ile Met Asn Ala Leu His Ser Leu Leu His Thr
                                        155
                    150
Leu Leu Met Asn Ser Leu Ser Phe Cys Ala Asn His Glu Ile Pro His
                                    170
                165
Phe Phe Cys Asp Ile Asn Pro Leu Leu Ser Leu Ser Cys Thr Asp Pro
                                185
Phe Thr Asn Glu Leu Val Ile Phe Ile Thr Gly Gly Leu Thr Gly Leu
        195
                            200
                                                205
Ile Cys Val Leu Cys Leu Ile Ile Ser Tyr Thr Asn Val Phe Ser Thr
                        215
                                            220
Ile Leu Lys Ile Pro Ser Ala Gln Gly Lys Arg Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ser Ser His Leu Ser Val Val Ser Leu Phe Phe Gly Thr Ser Phe
                245
                                    250
Cys Val Asp Phe Ser Ser Pro Ser Thr His Ser Ala Gln Lys Asp Thr
            260
                                265
                                                    270
Val Ala Ser Val Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
        275
                            280
                                                285
Ile Tyr Ser Leu Arg Asn Gln Glu Ile Lys Ser Ser Leu Arg Lys Leu
                        295
Ile Trp Val Arg Lys Ile His Ser Pro
                    310
<210> 2559
<211> 117
<212> PRT
<213> Unknown (2695895-dir-0-5 conceptual translation of range 2-351)
<220>
<221> VARIANT
<222> (1)...(117)
<223> Xaa = Any Amino Acid
<400>2559
Asp Leu Cys Tyr Ser Thr Val Ile Ala Pro Lys Ala Leu Ala Ile Phe
                                    10
Leu Ser Lys Asp Lys Lys Ile Ser Tyr Asn Gly His Ala Ala Xaa Phe
                                25
Tyr Phe Leu Cys Cys Val Gly Thr Glu Gly Leu Leu Ala Val Met
        35
                            40
```

```
Ala Tyr Asp His Phe Ser Ala Phe Cys Ser Pro Phe Leu Tyr Pro Val
 Arg Met Ser Gln Gln Val Cys Val His Leu Val Ile Gly Ser Tyr Ile
                    70
 Cys Gly Gly Ile Asn Ser Met Val Gln Thr Gly Phe Thr Phe Ser Leu
                85
                                     90
 Asn Phe Cys Gly Glu Asn Xaa Leu Asp His Phe Phe Cys Asp Val Pro
            100
                                105
 Ala Leu Ile Lys Ile
        115
 <210> 2560
 <211> 216
 <212> PRT
 <213> Unknown (2921661-dir-0-8 conceptual translation of range 2-649)
<400>2560
Leu Ala Asp Ala Cys Phe Val Ser Thr Thr Val Pro Lys Met Leu Ala
                                     10
Asn Ile Gln Ile Gln Ser Gln Ala Ile Ser Tyr Ser Gly Cys Leu Leu
            20
                                25
Gln Leu Tyr Phe Phe Met Leu Phe Val Met Leu Glu Ala Phe Leu Leu
        35
Ala Val Met Ala Tyr Asp Cys Tyr Val Ala Ile Cys His Pro Leu His
                        55
Tyr Ile Leu Ile Met Ser Pro Gly Leu Arg Ile Phe Leu Val Ser Ala
                    70
                                        75
Ser Trp Ile Met Asn Ala Leu His Ser Leu Leu His Thr Leu Leu Met
                85
                                    90
Asn Ser Leu Ser Phe Cys Ala Asn His Glu Ile Pro His Phe Leu Cys
                                105
Asp Ile Asn Pro Leu Leu Gly Leu Ser Cys Thr Asp Pro Phe Thr Asn
                            120
                                                125
Glu Leu Val Ile Phe Ile Thr Gly Gly Leu Thr Gly Leu Ile Cys Val
                        135
                                            140
Leu Cys Leu Ile Ile Ser Tyr Thr Asn Val Phe Ser Thr Ile Leu Lys
                   150
                                        155
Ile Pro Ser Ala Gln Gly Lys Arg Lys Ala Phe Ser Thr Cys Ser Ser
                165
                                    170
His Leu Ser Val Val Ser Leu Phe Phe Gly Thr Ser Phe Cys Val Asp
            180
                                185
                                                    190
Phe Ser Ser Pro Ser Thr His Ser Ala Gln Lys Asp Thr Val Ala Ser
        195
                            200
Val Met Tyr Thr Val Val Thr Pro
    210
<210> 2561
<211> 313
<212> PRT
<213> Unknown (p19-dir-0-11 conceptual translation of range 1-939)
Met Glu Gly Lys Asn Leu Thr Ser Ile Ser Glu Phe Phe Leu Leu Gly
                                    10
Phe Ser Glu Gln Leu Glu Gln Lys Ala Leu Phe Gly Ser Phe Leu
                                25
Phe Met Tyr Leu Val Met Val Ala Gly Asn Leu Leu Ile Ile Leu Val
                            40
Ile Ile Thr Asp Thr Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ala
                        55
Asn Leu Ser Leu Ala Asp Ala Cys Phe Val Ser Thr Thr Val Pro Lys
```

```
75
                   70
Met Leu Ala Asn Ile Gln Ile Gln Ser Gln Ala Ile Ser Tyr Ser Gly
                                   90
               85
Cys Leu Leu Gln Leu Tyr Phe Phe Met Leu Phe Val Met Leu Glu Ala
                               105
           100
Phe Leu Leu Ala Val Met Ala Tyr Asp His Tyr Val Ala Ile Cys His
                           120
                                               125
        115
Pro Leu His Tyr Ile Leu Ile Met Ser Pro Gly Leu Cys Val Phe Leu
                                           140
                       135
Val Ser Ala Ser Trp Ile Met Asn Ala Leu Tyr Ser Leu Leu His Thr
                                       155
                   150
Leu Leu Met Asn Ser Leu Ser Phe Cys Ala Asn His Glu Ile Pro His
                                  170
              165
Phe Phe Cys Asp Ile Asp Pro Leu Leu Ser Leu Ser Cys Ala Asp Pro
           180
                              185
Phe Thr Asn Glu Leu Val Ile Phe Ile Thr Gly Gly Leu Thr Gly Leu
                           200
        195
Ile Cys Val Leu Cys Leu Ile Ile Ser Tyr Thr Asn Val Phe Ser Thr
                       215
                                           220
Ile Leu Lys Ile Pro Ser Ala Gln Gly Lys Arg Lys Ala Phe Ser Thr
                   230
                                       235
Cys Ser Ser His Leu Ser Val Val Ser Leu Phe Cys Gly Thr Ser Phe
                                   250
               245
Cys Val Tyr Phe Ser Pro Pro Ser Thr Arg Ser Ala Gln Lys Asp Thr
                                                   270
                               265
Val Ala Ser Val Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                          280
                                              285
Ile Tyr Ser Leu Arg Asn Gln Glu Ile Lys Ser Ser Leu Arg Lys Leu
                     295
Ile Trp Val Arg Lys Ile His Ser Pro
                   310
<210> 2562
<211> 313
<212> PRT
<213> Unknown (p40-dir-0-11 conceptual translation of range 1-938)
<400>2562
Met Glu Gly Lys Asn Leu Thr Ser Ile Ser Glu Phe Phe Leu Leu Gly
Phe Ser Glu Gln Leu Glu Glu Gln Lys Ala Leu Leu Val Ser Phe Leu
                               25
           20
Phe Met Tyr Leu Val Thr Val Ala Gly Asn Leu Leu Ile Ile Leu Val
                           40
        35
Ile Ile Thr Asp Thr Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ala
                       55
                                           60
Asn Leu Ser Leu Ala Asp Ala Cys Phe Val Ser Thr Thr Val Pro Lys
                · 70
                                       75
Met Leu Ala Asn Ile Gln Ile Gln Ser Gln Ala Ile Ser Tyr Ser Gly
               85
                                   90
Cys Leu Leu Gln Leu Tyr Phe Phe Met Leu Phe Val Met Leu Glu Ala
                               105
                                                  110
           100
Phe Leu Leu Ala Val Met Ala Tyr Asp His Tyr Val Ala Ile Cys His
                                              125
        115
                           120
Pro Leu His Tyr Ile Leu Ile Met Ser Pro Gly Leu Cys Val Phe Leu
                      135
Val Ser Ala Ser Trp Ile Met Asp Ala Leu His Ser Leu Leu His Thr
                  150
                                       155
Leu Leu Met Asn Ser Leu Ser Phe Tyr Ala Asn His Glu Thr Pro His
                                 170
               165
Phe Phe Cys Asp Ile Asp Pro Leu Leu Ser Leu Ser Cys Thr Asp Pro
```

```
185
                                                   190
           180
Phe Thr Asn Glu Leu Val Ile Phe Ile Thr Gly Gly Leu Thr Gly Leu
                                 . 205
                           200
Val Cys Val Leu Cys Leu Ile Ile Ser Tyr Thr Asn Ile Phe Ser Thr
                                          220
                       215
Ile Leu Lys Ile Pro Ser Ala Gln Gly Lys Arg Lys Ala Phe Ser Thr
                                      235
                   230
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Phe Gly Thr Ser Phe
                                   250
               245
Cys Val Tyr Phe Ile Pro Pro Ser Thr Arg Ser Ala Gln Lys Asp Thr
                               265
           260
Val Ala Ser Val Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                                               285
                           280
Ile Tyr Ser Leu Arg Asn Gln Glu Ile Lys Ser Ser Leu Arg Lys Leu
                                           300
                       295
Ile Trp Val Arg Glu Ile His Ser Pro
                   310
<210> 2563
<211> 161
<212> PRT
<213> Unknown (293757-dir-0-6 conceptual translation of range 2-484)
<400>2563
Arg Tyr Val Ala Ile Cys Lys Pro Leu Thr Tyr Lys Val Ile Met Ser
                5
Pro Lys Ile Cys Cys Leu Leu Ile Phe Ser Ser Tyr Leu Met Gly Phe
           20
                               25
Ala Ser Ala Met Ala His Thr Gly Cys Met Ile Arg Leu Ser Phe Cys
                           40
Asp Ser Asn Ile Ile Asn His Tyr Met Cys Asp Ile Phe Pro Leu Leu
Pro Leu Ser Cys Ser Ser Thr Tyr Val Asn Glu Leu Met Ser Ser Val
                   70
                                       75
Val Val Gly Ser Ala Ile Ile Leu Cys Cys Leu Ile Ile Leu Ile Ser
                                   90
               85
Tyr Ala Met Ile Leu Phe Asn Ile Ile His Met Ser Ser Gly Lys Gly
                               105
           100
Trp Ser Lys Ala Leu Gly Thr Cys Gly Ser His Ile Ile Thr Val Ser
                           120
                                               125
Leu Phe Tyr Gly Ser Gly Leu Leu Ala Tyr Val Lys Pro Ser Ser Ala
                      135
                                          140
Lys Thr Val Gly Gln Gly Lys Phe Phe Ser Val Phe Tyr Thr Leu Leu
                  150
145
Val
<210> 2564
<211> 313
<212> PRT
<213> Unknown (p39-dir-0-11 conceptual translation of range 1-939)
<400>2564
Met Glu Gly Lys Asn Leu Thr Ser Ile Ser Glu Phe Phe Leu Leu Gly
Phe Ser Glu Gln Leu Glu Gln Lys Ala Leu Phe Gly Ser Phe Leu
           20
                               25
Phe Met Tyr Leu Val Thr Val Ala Gly Asn Leu Leu Ile Ile Leu Val
                           40
Ile Ile Thr Asp Thr Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ala
                        55
```

```
Asn Leu Ser Leu Ala Asp Ala Cys Phe Val Ser Thr Thr Val Pro Lys
                    70
                                         75
 Met Leu Ala Asn Ile Gln Ile Gln Ser Gln Ala Ile Ser Tyr Ser Gly
                85
                                     90
 Cys Leu Leu Gln Leu Tyr Phe Phe Met Leu Phe Val Met Leu Glu Ala
             100
                                105
 Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
                            120
 Pro Leu His Tyr Ile Leu Ile Met Ser Pro Gly Leu Cys Val Phe Leu
                        135
                                            140
 Val Ser Ala Ser Trp Ile Met Asn Ala Leu His Ser Leu Leu His Thr
                     150
                                        155
 Leu Leu Met Asn Ser Leu Ser Phe Cys Ala Asn His Glu Ile Pro His
     165
                                    170
 Phe Phe Cys Asp Ile Asp Pro Leu Leu Ser Leu Ser Cys Thr Asp Pro
             180
                                 185
                                                    190
 Phe Thr Asn Glu Leu Val Ile Phe Ile Thr Gly Gly Leu Thr Gly Leu
                             200
 Val Cys Val Leu Cys Leu Ile Ile Ser Tyr Thr Asn Ile Phe Ser Thr
                        215
                                            220
 Ile Leu Lys Ile Pro Ser Ala Gln Gly Lys Arg Lys Ala Phe Ser Thr
                    230
                                        235
 Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Phe Gly Thr Ser Phe
                245
                                    250
 Cys Val Tyr Phe Ile Pro Pro Ser Thr Arg Ser Ala Gln Lys Asp Thr
            260
                                265
                                                    270
 Val Ala Ser Val Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
        275
                            280
 Ile Tyr Ser Leu Arg Asn Gln Glu Ile Lys Ser Ser Leu Arg Lys Leu
    290
                        295
                                           300
Ile Trp Val Arg Glu Ile His Ser Pro
                    310
<210> 2565
<211> 315
<212> PRT
<213> Unknown (3738097-rev-723-12 conceptual translation of range 72448-
73392)
<220>
<221> VARIANT
<222> (1)...(315)
<223> Xaa = Any Amino Acid
<400>2565
Met Leu Ala Arg Asn Asn Ser Leu Val Thr Glu Phe Ile Leu Ala Gly
1
                5
                                    10
Leu Thr Asp Arg Pro Glu Phe Trp Gln Pro Phe Phe Leu Phe Leu
            20
                                25
Val Ile Tyr Ile Val Thr Met Val Gly Asn Leu Gly Leu Ile Thr Leu
                           40
Phe Gly Leu Asn Ser His Leu His Thr Pro Met Tyr Tyr Phe Leu Phe
                      ` 55
                                           60
Asn Leu Ser Phe Ile Asp Leu Cys Tyr Ser Ser Val Phe Thr Pro Lys
                   70
                                       75
Met Leu Met Asn Phe Val Ser Lys Lys Asn Ile Ile Ser Asn Val Gly
               85
                                   90
Cys Met Thr Arg Leu Phe Phe Phe Leu Phe Phe Val Ile Ser Glu Cys
        100
                              105
Tyr Met Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
       115
                           120
```

```
Pro Leu Leu Tyr Lys Val Thr Met Ser His Gln Val Cys Ser Met Leu
                        135
                                           140
Thr Phe Ala Ala Tyr Ile Met Gly Leu Ala Gly Ala Thr Ala His Thr
                    150
                                       155
Gly Cys Met Phe Arg Leu Thr Phe Cys Ser Ala Asn Ile Ile Asn His
               165
                                   170
Tyr Leu Cys Asp Ile Leu Pro Leu Leu Gln Leu Ser Cys Thr Ser Thr
                               185
Tyr Val Asn Glu Val Val Val Leu Ile Val Val Gly Thr Asn Ile Thr
                           200
Val Pro Ser Cys Thr Ile Leu Ile Ser Tyr Val Phe Ile Val Thr Ser
                        215
                                            220
Ile Leu His Ile Lys Ser Thr Gln Gly Arg Ser Lys Ala Phe Ser Thr
                   230
                                       235
Cys Ser Ser His Val Ile Ala Leu Ser Leu Phe Phe Gly Ser Ala Ala
               245
                                   250
Phe Met Tyr Ile Lys Tyr Ser Ser Gly Ser Met Glu Gln Gly Lys Val
                                                    270
                               265
Phe Ser Val Phe Tyr Thr Asn Val Val Pro Met Leu Asn Pro Leu Ile
        275
                           280
Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Ala Leu Arg Lys Ala Leu
                        295
Ile Lys Ile Gln Arg Arg Asn Ile Phe Xaa Leu
                    310
<210> 2566
<211> 313
<212> PRT
<213> Unknown (p41-dir-0-11 conceptual translation of range 1-938)
<400>2566
Met Glu Gly Lys Asn Leu Thr Ser Ile Ser Glu Phe Phe Leu Leu Gly
                                   10
Phe Ser Glu Gln Leu Glu Glu Gln Lys Ala Leu Phe Gly Ser Phe Leu
                                25
Phe Met Tyr Leu Val Thr Val Ala Gly Asn Leu Leu Ile Ile Leu Val
Ile Ile Thr Asp Thr Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ala
                       55
                                            60
Asn Leu Ser Leu Ala Asp Ala Cys Phe Val Ser Thr Thr Val Pro Lys
                    70
                                       75
Met Leu Ala Asn Ile Arg Ile Gln Ser Gln Ala Ile Ser Tyr Ser Gly
                                   90
Cys Leu Leu Gln Leu Tyr Phe Phe Met Leu Phe Val Met Leu Glu Ala
                           105
Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
                          120
                                               125
Pro Leu His Tyr Ile Leu Ile Met Ser Pro Gly Leu Cys Val Phe Leu
                       135
                                           140
Val Ser Ala Ser Trp Ile Met Asn Ala Leu His Ser Leu Leu His Thr
                   150
                                       155
Leu Leu Met Asn Ser Leu Ser Phe Cys Thr Asn Arg Glu Ile Pro His
               165
                                   170
Phe Phe Cys Asp Ile Asn Pro Leu Leu Ser Leu Ser Cys Thr Asp Pro
                               185
Phe Thr Asn Glu Leu Val Ile Phe Ile Thr Gly Gly Val Ala Gly Leu
                           200
                                               205
Val Cys Val Leu Cys Leu Ile Ile Ser Tyr Met Asn Val Phe Ser Thr
                       215
                                           220
Ile Leu Lys Ile Pro Ser Ala Gln Gly Lys Arg Ser Ser Phe Ser Thr
                                       235
```

```
Cys Ser Ser His Leu Ser Val Val Ser Leu Phe Phe Gly Thr Ser Phe
                                250
               245
Cys Val Tyr Val Ser Pro Pro Ser Thr Leu Ser Ala Gln Lys Asp Thr
            260
                               265
Val Ala Ser Val Met Tyr Thr Val Val Thr Pro Thr Leu Asn Pro Phe
                          280
       275
Ile Tyr Ser Leu Arg Asn Gln Glu Ile Lys Ser Ser Leu Arg Lys Ile
                      295
                                           300
Ile Trp Val Arg Lys Ile His Ser Pro
                   310
<210> 2567
<211> 315
<212> PRT
<213> Unknown (2317703-dir-0-13 conceptual translation of range 211-1155)
<220>
<221> VARIANT
<222> (1)...(315)
<223> Xaa = Any Amino Acid
<400>2567
Met Ala Thr Gly Asn Tyr Cys Val Phe Pro Glu Phe Ile Leu Thr Gly
                5
                                   10
Leu Ser Lys Lys Ser Glu Leu Gln Met Pro Leu Phe Val Leu Phe Leu
           20
                               25
Gly Ile Tyr Ile Val Thr Val Val Gly Asn Leu Gly Met Ile Thr Leu
                           40
                                                45
Ile Arg Leu Ser Ser Leu Leu His Thr Pro Met Tyr Tyr Phe Leu Ser
                       55
                                           60
Ser Leu Ser Phe Ile Asp Leu Cys His Ser Thr Val Ile Thr Pro Lys
                                       75
                   70
Met Leu Val Asn Phe Val Ala Glu Lys Asn Ile Ile Ser Tyr Thr Gly
               85
                                   90
Cys Met Thr Gln Leu Phe Phe Phe Leu Ile Phe Ala Ile Ala Glu Cys
                                                   110
                               105
His Met Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                           120
                                               125
Pro Leu Leu Tyr Asn Ala Ile Met Ser Tyr Gln Ser Tyr Ile Ser Met
                                           140
                       135
Ile Ser Gly Val Tyr Ile Ile Gly Val Val Cys Ala Ser Ala His Thr
                                       155
                   150
Gly Phe Met Ile Arg Ser Gln Phe Cys Asn Leu Asp Val Ile Asn His
                                   170
               165
Tyr Phe Cys Asp Leu Leu Pro Leu Leu Glu Leu Ala His Ser Ser Thr
                               185
                                                   190
Tyr Val Asn Glu Leu Val Ile Leu Ile Cys Gly Thr Cys Asn Ile Val
                           200
                                               205
Val Pro Thr Leu Thr Ile Leu Thr Ser Tyr Ile Phe Ile Ile Ala Thr
                                           220
                       215
Ile Leu His Ile Arg Ser Thr Glu Gly Arg Tyr Lys Ala Phe Ser Thr
                   230
                                       235
Cys Ser Ser His Ile Leu Ala Val Ala Val Phe Phe Gly Ser Ala Ala
                                   250
               245
Phe Met Tyr Leu Gln Pro Ser Ser Val Ser Ser Met Asp Gln Gly Lys
                               265
           260
Val Ser Ser Val Phe Tyr Thr Ile Val Val Pro Met Leu Asn Pro Leu
                          280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Ser Thr Ala Leu Lys Lys Ile
                      295
```

Leu Glu Arg Lys Ser Phe Val Xaa Thr Glu Val

```
315
                   310
<210> 2568
<211> 114
<212> PRT
<213> Unknown (888-dir-0-5 conceptual translation of range 2-343)
<400>2568
Ile Cys Lys Pro Leu Leu Tyr Pro Val Ile Met Ser Asn Thr Leu Cys
                                   10
               5
Ile Arg Leu Leu Val Leu Ser Leu Leu Gly Gly Leu Leu His Ala Ile
                               25
Ile His Ser Ser Phe Leu Phe Arg Leu Thr Phe Cys Asp Ser Ile Ile
                            40
Val His His Phe Tyr Cys Asp Ile Ile Pro Leu Leu Lys Ile Thr Cys
                       55
Thr Asp Pro Ser Ile Asn Tyr Leu Ile Val Phe Ile Phe Ala Gly Ser
Ile Gln Met Phe Thr Ile Leu Ile Val Leu Val Ser Tyr Thr Leu Val
                                    90
Leu Phe Thr Ile Leu Arg Lys Lys Ser Leu Gln Gly Ile Lys Lys Ala
                                105
Phe Ser
<210> 2569
<211> 159
<212> PRT
<213> Unknown (1514485-dir-0-6 conceptual translation of range 2-478)
Val Ala Ile Cys Asn Pro Leu Leu Tyr Thr Ile Ser Met Pro Lys Ser
                                    10
Leu Cys Met Lys Leu Val Ala Gly Ser Tyr Leu Gly Gly Val Leu Asn
           20
                                25
Ser Leu Thr Gln Thr Cys Cys Leu Leu Pro Leu Pro Phe Cys Gly Pro
                            40
Asn Val Ile Asn His Tyr Phe Cys Asp Thr Asn Pro Leu Leu Lys Leu
                        55
Thr Cys Ser Asp Gly Arg Leu Asn Glu Leu Leu Leu Val Thr Phe Asn
                                        75
Gly Thr Ile Ser Met Thr Val Leu Leu Ile Ile Val Ile Ser Tyr Val
                                    90
Tyr Ile Leu Val Ser Ile Leu Ser Ile Arg Ser Ala Arg Gly Arg His
                                                    110
                                105
            100
Lys Ala Phe Ser Thr Cys Ala Ser His Leu Leu Thr Val Thr Leu Phe
                                                125
                           120
Tyr Val Pro Ala Gly Leu Ser His Met Gln Pro Gly Ser Lys Tyr Ser
                                           140
                       135
Leu Asp Met Glu Lys Val Thr Ala Val Phe Tyr Thr Leu Leu Val
                   150
<210> 2570
<211> 131
<212> PRT
<213> Unknown (1514487-dir-0-5 conceptual translation of range 2-394)
<400>2570
Val Ala Ile Cys Ser Pro Leu Leu Tyr Ser Thr Val Met Thr Lys Arg
                                    10
Val Cys Met Gln Leu Val Val Gly Ser Tyr Met Gly Gly Leu Leu Asn
```

```
25
 Ser Leu Thr His Thr Cys Gly Leu Leu Gly Leu Pro Phe Cys Gly Pro
                             40
Asn Val Ile Asn His Tyr Phe Cys Asp Ile Pro Pro Leu Leu Gln Leu
                        5.5
                                            60
Ala Cys Ser Asp Thr His Arg Asn Glu Thr Leu Leu Ala Phe Ser
                    70
Ala Val Ile Ala Leu Phe Thr Leu Phe Val Ile Thr Ala Ser Tyr Met
                                    90
                85
Leu Ile Leu Ser Val Ile Leu Lys Ile Gln Ser Asp Asp Gly Arg Lys
                               105
                                                    110
Lys Thr Phe His Thr Cys Ala Ser His Leu Thr Ala Ile Thr Ile Phe
                            120
Phe Gly Ser
    130
<210> 2571
<211> 114
<212> PRT
<213> Unknown (32508-dir-0-5 conceptual translation of range 2-343)
<400>2571
Ile Val Ser Pro Leu Leu Tyr Thr Val Ala Met Ser Asp Arg Lys Cys
 1
                                    10
Val Glu Leu Val Thr Gly Ser Trp Ile Gly Gly Ile Val Asn Thr Leu
            20
                                25
Ile His Thr Ile Ser Leu Arg Arg Leu Ser Phe Cys Arg Leu Asn Ala
                            40
                                                45
Val Ser His Phe Phe Cys Asp Ile Pro Ser Leu Leu Lys Leu Ser Cys
                        55
Ser Asp Thr Ser Met Asn Glu Leu Leu Leu Leu Thr Phe Ser Gly Val
                    70
                                        75
Ile Ala Met Ala Thr Phe Leu Thr Val Ile Ile Ser Tyr Ile Phe Ile
               85
                                   90
Ala Phe Ala Ser Leu Arg Ile His Ser Ala Ser Gly Arg Gln Gln Ala
Phe Ser
<210> 2572
<211> 315
<212> PRT
<213> Unknown (p42-dir-0-11 conceptual translation of range 1-945)
<400>2572
Met Glu Ser Glu Ala Gly Thr Asn Arg Thr Ala Val Ala Glu Phe Ile
                                    10
Leu Leu Gly Leu Val Gln Thr Glu Glu Met Gln Ser Val Val Phe Val
                                25
Leu Leu Phe Ala Tyr Leu Val Thr Thr Gly Gly Asn Pro Ser Ile
                            40
Leu Ala Ala Val Leu Val Glu Pro Lys Leu His Thr Pro Met Tyr Phe
Phe Leu Gly Asn Leu Ser Val Leu Asp Val Gly Cys Ile Thr Val Thr
                   70
                                        75
Val Pro Ala Met Leu Gly Arg Leu Leu Ser His Lys Cys Ile Ile Ser
               85
                                    90
Tyr Asp Ala Cys Leu Ser Gln Leu Phe Phe Phe His Leu Leu Ala Gly
           100
                               105
                                                   110
Met Asp Cys Phe Leu Leu Thr Ala Met Ala Tyr Asp Arg Phe Leu Ala
                           120
                                               125
```

```
Ile Cys Arg Pro Leu Thr Tyr Ser Thr Arg Met Ser Gln Thr Val Gln
                     135
                                            140
Gly Met Leu Val Ala Val Ser Trp Thr Cys Ala Phe Thr Asn Ala Leu
                    150
                                        155
Thr His Thr Ile Ala Leu Thr Thr Leu Asn Phe Cys Gly Pro Ser Val
                165
                                    170
Ile Asn His Phe Tyr Cys Asp Leu Pro Gln Leu Phe Gln Leu Ser Cys
            180
                                185
Ser Ser Thr Gln Leu Asn Glu Leu Leu Phe Val Ala Ala Ala Phe
                            200
Met Ala Val Val Pro Leu Val Leu Ile Ser Val Ser Tyr Ala His Val
                        215
                                            220
Val Ala Ala Val Leu Gln Ile His Ser Ala Glu Gly Arg Lys Lys Ala
                    230
                                        235
Phe Ser Thr Cys Gly Ser His Leu Thr Val Val Gly Ile Phe Tyr Gly
                245
                                    250
Thr Gly Val Phe Ser Tyr Met Arg Leu Gly Ser Val Glu Ser Ser Asp
            260
                                265
Lys Asp Lys Gly Val Gly Val Phe Met Thr Val Ile Asn Pro Met Leu
                            280
        275
                                                285
Asn Pro Leu Ile Tyr Ser Leu Arg Asn Thr Asp Val Gln Gly Ala Leu
                        295
Trp Gln Leu Leu Val Gly Lys Arg Ser Leu Thr
                    310
<210> 2573
<211> 315
<212> PRT
<213> Unknown (p176-dir-0-11 conceptual translation of range 1-945)
<400>2573
Met Gln Pro Glu Ser Gly Ala Asn Gly Thr Val Ile Ala Glu Phe Ile
Leu Leu Gly Leu Leu Glu Ala Pro Gly Leu Gln Pro Val Val Phe Val
            20
                                25
Leu Phe Leu Phe Ala Tyr Leu Val Thr Val Gly Gly Asn Leu Ser Ile
                            40
Leu Ala Ala Val Leu Val Glu Pro Lys Leu His Ser Pro Met Tyr Phe
                        55
                                            60
Phe Leu Gly Asn Leu Ser Val Leu Asp Val Gly Cys Ile Ser Val Thr
                    70
                                        75
Val Pro Ser Met Leu Ser Arg Leu Leu Ser Arg Lys Arg Ala Val Pro
                                    90
                85
Cys Gly Ala Cys Leu Thr Gln Leu Phe Phe Phe His Leu Phe Val Gly
            100
                                105
                                                    110
Val Asp Cys Phe Leu Leu Thr Ala Met Ala Tyr Asp Arg Phe Leu Ala
                            120
                                                125
Ile Cys Arg Pro Leu Thr Tyr Ser Thr Arg Met Ser Gln Thr Val Gln
                        135
Arg Met Leu Val Ala Ala Ser Trp Ala Cys Ala Phe Thr Asn Ala Leu
                    150
                                        155
Thr His Thr Val Ala Met Ser Thr Leu Asn Phe Cys Gly Pro Asn Glu
                165
                                    170
Val Asn His Phe Tyr Cys Asp Leu Pro Gln Leu Phe Gln Leu Ser Cys
            180
                                185
Ser Ser Thr Gln Leu Asn Glu Leu Leu Phe Ala Val Gly Phe Ile
       195
                            200
                                                205
Met Ala Gly Thr Pro Met Ala Leu Ile Val Ile Ser Tyr Ile His Val
                                           220
                       215
Ala Ala Val Leu Arg Ile Arg Ser Val Glu Gly Arg Lys Lys Ala
                                        235
```

```
Phe Ser Thr Cys Gly Ser His Leu Thr Val Val Ala Met Phe Tyr Gly
                245
                              250
 Ser Gly Ile Phe Asn Tyr Met Arg Leu Gly Ser Thr Lys Leu Ser Asp
                                 265
 Lys Asp Lys Ala Val Gly Ile Phe Asn Thr Val Ile Asn Pro Met Val
        275
                             280
 Asn Pro Ile Ile Tyr Arg Phe Arg Asn Pro Glu Val Gln Ser Ala Ile
                        295
                                            300
Trp Arg Met Leu Thr Gly Arg Arg Ser Leu Ala
                    310
<210> 2574
 <211> 162
 <212> PRT
 <213> Unknown (1552397-dir-0-6 conceptual translation of range 1-486)
Val Ala Val Cys His Pro Leu Leu Tyr Val Phe His Met Ser Gln Lys
 1
                                    10
His Cys Thr Phe Phe Val Ser Ala Ala Trp Ile Ile Gly Phe Leu Asp
            20
                                25
Pro Thr Ser Tyr Val Val Leu Ile Ser Lys Phe Ser Phe Cys Thr Ser
                            40
                                                 45
Asn Ile Ile Asp His Phe Phe Cys Asp Leu Ala Pro Leu Leu Lys Leu
                        55
Ser Cys Ser Asp Thr Phe Gln Ile Glu Val Leu Asn Tyr Val Glu Ser
                    70
                                        75
Ala Leu Val Thr Leu Asn Ser Phe Val Leu Thr Val Ile Ser Tyr Ile
                85
                                    90
Phe Thr Ile Ser Ala Ile Leu Asn Ile Lys Ser Ala Glu Gly Arg His
            100
                                105
                                                     110
Lys Ala Phe Ser Thr Cys Thr Ser His Leu Thr Cys Val Ile Ile Phe
                            120
                                                 125
Tyr Ser Thr Ile Ile Ser Leu Tyr Ile Arg Pro Ile Ser Thr Tyr Ala
                       135
                                            140
Pro Lys Gln Asp Gln Phe Phe Ala Leu Leu Tyr Ile Val Leu Ile Pro
                    150
                                        155
Leu Leu
<210> 2575
<211> 161
<212> PRT
<213> Unknown (1552399-dir-0-6 conceptual translation of range 1-483)
<400>2575
Val Ala Ile Cys Tyr Pro Leu His Tyr Ala Leu Arg Met Ser Leu Lys
                                    10
His Cys Ala Lys Ile Ile Val Gly Val Trp Val Ala Gly Phe Leu Ala
            20
                                25
Pro Val Ile His Thr Val Leu Met Thr Asn Leu Ser Phe Cys Ser Ser
        35
                            40
Asn His Ile Asn His Phe Leu Cys Asp Leu Thr Pro Val Leu Lys Ile
                        55
Ser Cys Ser Asp Thr Ser Leu Ile Glu Met Ile Thr Tyr Ile Asp Gly
                    70
                                        75
Val Ile Val Ala Phe Ser Thr Phe Thr Ile Thr Ser Val Ser Tyr Val
                85
                                    90
Phe Ile Leu Phe Lys Ile Leu Lys Ile His Ser Ser Gln Gly Lys Lys
           100
                                105
Lys Ala Leu Ser Thr Cys Thr Ser His Leu Thr Cys Val Ile Ile Phe
```

```
115
                            120
Tyr Gly Ser Ile Ile Cys Leu Tyr Met Arg Pro Thr Lys Ser Ile Ser
                       135
                                           140
Pro Asn Gln Asp Val Phe Ala Leu Leu Tyr Ala Val Leu Val Pro Met
                    150
Leu
<210> 2576
<211> 160
<212> PRT
<213> Unknown (4877302-dir-0-6 conceptual translation of range 2-481)
<400>2576
Ile Ala Ile Cys Asn Pro Leu Arg Tyr Thr Ser Ile Ile Ser Thr Lys
                                   10.
Val Cys Ile Leu Leu Ala Ala Leu Arg Trp Ser Val Gly Phe Val Cys
           20
                                25
Thr Leu Pro Cys Thr Val Leu Leu Leu Arg Leu Ser Phe Cys Gly Pro
                           40
                                                45
Lys Glu Ile Tyr His Tyr Tyr Cys Asp His Pro Gln Ile Leu Lys Val
                        55
Ala Cys Asn Asp Thr Ser Leu Asn Tyr Tyr Val Ser Leu Tyr Val Ala
                    70
                                        75
Ala Val Val Ile Val Val Pro Phe Leu Phe Ile Leu Ser Thr Tyr Leu
                                    90
Gly Ile Leu Arg Ala Val Leu Lys Ile Arg Ser Ala Glu Gly Arg Arg
                                105
Lys Thr Phe Ser Thr Cys Ser Ser His Leu Val Cys Val Val Ile Phe
                            120
                                                125
Tyr Leu Ser Ala Gly Phe Ala Tyr Phe Arg Pro Gln Glu Thr Ser Ala
                       135
                                            140
Ser Asp Tyr Ser Ile Met Ala Ser Leu Leu Tyr Ser Thr Leu Ser Pro
<210> 2577
<211> 153
<212> PRT
<213> Unknown (2564501-dir-0-6 conceptual translation of range 1-459)
<400>2577
Lys Pro Leu His Tyr Met Thr Ile Met Ser His Arg Thr Cys Gly Leu
                                    10
Leu Val Ala Ala Ser Trp Val Gly Gly Ser Ile His Ser Leu Leu Gln
                                25
Thr Leu Leu Leu Ala Trp Leu Pro Tyr Cys Gly Pro Asn Met Ile Asp
                            40
Ser Phe Phe Cys Asp Ala Pro Pro Leu Leu Lys Leu Ala Cys Thr Asp
Thr Thr Leu Val Gly Trp Leu Ile Leu Cys Asn Gly Gly Leu Ile Ala
                    70
                                        75
Val Cys Ser Phe Ser Val Leu Val Thr Ser Tyr Thr Phe Ile Ile Arg
               85
                                    90
Thr Pro Arg Thr Gln Leu Ile Glu Gly Lys Arg Arg Ala Leu Ser Thr
           100
                                105
Cys Gly Ser His Cys Ile Val Val Val Phe Phe Gly Pro Cys Ile
                           120
                                               125
Tyr Ile Tyr Leu Arg Pro Ser Ile Ser Ile Phe Leu Asp Lys Val Val
                       135
                                           140
Ser Val Phe Tyr Thr Leu Ile Thr Pro
                   150
```

```
<210> 2578
 <211> 152
 <212> PRT
 <213> Unknown (2564499-dir-0-6 conceptual translation of range 1-456)
Asn Pro Leu Arg Tyr Thr Thr Ile Met Ser Arg Lys Val Cys Ser Leu
                                    10
Leu Val Leu Ala Cys Trp Val Gly Gly Ala Val His Ser Thr Ala Gln
                                25
           20
Val Leu Leu Val Met Thr Leu Pro Phe Cys Gly Pro Asn Glu Val Gly
                            40
His Phe Phe Cys Asp Ile Pro Pro Leu Phe Pro Leu Val Cys Thr Asp
                        55
                                            60
Thr Phe Leu Ser Gly Val Leu Ile Met Ser Asn Ser Gly Leu Ile Ser
                    70
                                        75
Leu Ala Cys Phe Leu Thr Leu Ile Ile Ser Tyr Thr Leu Ile Leu Leu
                85
                                    90
Ala Val Arg Arg Cys Ser Ala Glu Gly Lys Ser Lys Ala Leu Ser Thr
            100
                                105
Cys Gly Thr His Leu Thr Val Val Thr Ile Ala Phe Gly Pro Ser Ile
        115
                            120
                                             125
Phe Ile Tyr Met Lys Pro Met Asn Leu Gln Val Asp Lys Ile Val Ala
                        135
                                           140
Leu Phe Phe Val Ile Ile Thr Pro
<210> 2579
<211> 205
<212> PRT
<213> Unknown (hg449-dir-0-7 conceptual translation of range 1-616)
<220>
<221> VARIANT
<222> (1)...(205)
<223> Xaa = Any Amino Acid
<400>2579
Leu Met Glu Ile Ser Tyr Phe Thr Val Val Pro Lys Phe Ile Thr Asp
                5
                                   10
Leu Leu Ala Lys Ile Lys Ala Ile Ser Leu Glu Gly Tyr Leu Ala Gln
                                25
Ile Phe Leu His Phe Cys Gly Ile Pro Trp Ile Phe Leu Leu Pro Leu
                            40
Met Thr Asn Asp Gln Tyr Met Ala Asn Cys Lys Leu Tyr Tyr Tyr Thr
Thr Ile Met Ser Cys Arg Val Cys His Leu Leu Val Ala Gly Phe Trp
                                        75
Leu Arg Gly Ile Ile His Ser Met Val Gln Ile Leu Val Ser Val Gln
                85
                                    90
Leu Phe Phe Cys Gly Pro Asn Met Ile Asp His Ser Phe Cys Asp Leu
           100
                               105
Gln Val Leu Phe Lys Leu Ala Cys Thr Asp Thr Phe Val Glu Gly Val
                            120
                                                125
Ile Val Leu Ala Asn Ser Glu Leu Val Ser Val Phe Phe Leu Ile Leu
                        135
                                           140
Val Ser Ser Tyr Ile Ile Ile Leu Val Asn Leu Arg Asn His Ser Ala
                   150
                                       155
Glu Gly Arg Cys Lys Ala Leu Ser Thr Cys Ala Ser Tyr Leu Val Phe
               165
                                   170
```

```
Xaa Thr Cys Ile Phe Leu Tyr Val Xaa Leu Ser Ser Thr Phe Thr Lys
                         185
Asp Lys Leu Val Ala Val Phe Tyr Val Ile Ile Thr Pro
                            200
<210> 2580
<211> 154
<212> PRT
<213> Unknown (902708-dir-0-6 conceptual translation of range 2-463)
<400>2580
Ile Cys Lys Pro Leu His Tyr Met Thr Ile Met Ser Arg Pro Val Cys
1
                                    10
Ile Phe Leu Val Gly Ala Ala Val Ile Leu Gly Phe Ile His Gly Ala
                                25
Ile Gln Thr Leu Phe Met Ala Gln Leu Pro Phe Cys Gly Pro Asn Ile
                            40
Ile Asn His Phe Met Cys Asp Leu Ile Pro Leu Leu Glu Leu Ala Cys
                        55
Thr Asp Thr His Thr Leu Gly Pro Leu Ile Ala Ala Asn Ser Gly Ser
                   70
                                       75
Leu Cys Leu Leu Thr Phe Ser Met Leu Val Val Ser Tyr Val Val Ile
                                    90
               85
Pro Arg Ser Leu Arg Asn His Ser Ser Glu Gly Arg Arg Lys Ala Leu
                                105
Ser Thr Cys Ala Ser His Val Thr Val Val Leu Phe Leu Val Pro
                           120
                                               125
Cys Ser Tyr Leu Tyr Leu Arg Pro Met Thr Ser Phe Pro Thr Asn Lys
                      135
Ala Val Thr Val Phe Cys Thr Leu Val Thr
                   150
<210> 2581
<211> 114
<212> PRT
<213> Unknown (32513-dir-0-5 conceptual translation of range 2-343)
<400>2581
Ile Cys Tyr Pro Leu Arg Tyr Thr Ala Ile Met Asn Pro Arg Ile Cys
                                    10
Val Ala Leu Ala Val Gly Thr Trp Leu Leu Gly Cys Ile His Ser Ser
                                25
Ile Leu Thr Ser Leu Thr Phe Thr Leu Pro Tyr Cys Gly Pro Asn Glu
                           40
                                               45
Val Asp His Phe Phe Cys Asp Ile Pro Ala Leu Leu Pro Leu Ala Cys
                       55
                                            60
Ala Asp Thr Ser Leu Ala Gln Arg Val Ser Phe Thr Ser Val Gly Leu
                   70
                                       75
Ile Ser Leu Val Cys Phe Leu Leu Ile Leu Leu Ser Tyr Thr Arg Ile
               85
                                   90
Thr Ile Ser Ile Leu Ser Ile Arg Thr Thr Glu Gly Arg Arg Ala
           100
                                105
                                                   110
Phe Ser
<210> 2582
<211> 114
<212> PRT
<213> Unknown (32516-dir-0-5 conceptual translation of range 2-343)
<400>2582
```

```
Ile Cys His Pro Leu Asn Tyr Pro Val Ile Met Asn Arg Gly Val Phe
                5
                                    10
Met Lys Leu Val Ile Phe Ser Trp Ile Ser Gly Ile Met Val Ala Thr
                                25
            20
Val Gln Thr Trp Val Phe Ser Phe Pro Phe Cys Gly Pro Asn Glu
Ile Asn His Leu Phe Cys Glu Thr Pro Pro Val Leu Glu Leu Val Cys
Ala Asp Thr Phe Leu Phe Glu Ile Tyr Ala Phe Thr Gly Thr Ile Leu
                    70
                                        75
Ile Val Met Val Pro Phe Leu Leu Ile Leu Leu Ser Tyr Ile Arg Val
                                    90
               85
Leu Phe Ala Ile Leu Lys Met Pro Ser Thr Thr Gly Arg Gln Lys Ala
                                105
Phe Ser
<210> 2583
<211> 195
<212> PRT
<213> Unknown (2252615-dir-0-7 conceptual translation of range 1-586)
<400>2583
Tyr Phe Phe Leu Ser Asn Leu Ser Phe Leu Asp Leu Cys Phe Thr Thr
1
                                    10
Ser Cys Val Arg Pro Gln Met Leu Val His Leu Trp Gly Pro His Lys
            20
                                25
Thr Ile Ser Phe Leu Gly Cys Ala Val Gln Leu Phe Ile Phe Leu Leu
                            40
                                                45
Leu Gly Thr Thr Glu Cys Val Leu Leu Thr Val Met Ala Phe Asp Arg
                        55
Tyr Val Ala Val Cys Gln Pro Leu His Tyr Ala Thr Ile Met His Pro
                                        75
Arg Leu Cys Arg Gln Leu Ala Ala Val Ala Trp Val Met Gly Leu Val
                85
                                    90
Gln Ser Ile Val Gln Thr Pro Pro Thr Leu Arg Leu Pro Phe Cys Pro
            100
                                105
His Arg Gln Ile Asp Asp Phe Val Cys Gln Val Pro Ser Leu Ile Arg
                            120
                                                125
Leu Ser Cys Gly Asp Thr Thr Phe Asn Gly Ile Gln Leu Ala Val Ser
                        135
                                            140
Ser Val Val Phe Leu Val Val Pro Leu Ala Leu Ile Leu Ile Ser Tyr
                   150
                                        155
Gly Ala Ile Ala Arg Ala Val Leu Arg Ile Ser Ser Ala Thr Ala Trp
               165
                                   170
Arg Lys Ala Leu Gly Thr Cys Ser Ser His Leu Ala Val Val Thr Leu
                                185
Phe Tyr Ser
       195
<210> 2584
<211> 106
<212> PRT
<213> Unknown (3328023-dir-0-5 conceptual translation of range 1-318)
<400>2584
Thr Thr Glu Cys Val Leu Leu Thr Val Met Ala Phe Asp Arg Tyr Val
                5
Ala Val Cys Gln Pro Leu His Tyr Ala Thr Ile Met His Pro Arg Leu
Cys Arg Gln Leu Ala Ala Val Ala Trp Val Met Gly Leu Val Gln Ser
```

```
40
Ile Val Gln Thr Pro Pro Thr Leu Arg Leu Pro Phe Cys Pro His Arg
                         55
Arg Val Asp Asp Phe Val Cys Glu Val Pro Ala Leu Ile Arg Leu Ser
Cys Gly Asp Thr Thr Tyr Asn Glu Ile Gln Met Ala Val Ala Ser Val
                85
                                    90
Phe Ile Leu Val Val Pro Leu Ser Leu Ile
            100
<210> 2585
<211> 194
<212> PRT
<213> Unknown (2828696-dir-0-7 conceptual translation of range 1-582)
<400>2585
Tyr Phe Phe Leu Ser Asp Leu Ser Phe Leu Asp Leu Cys Phe Thr Thr
                                    10
Ser Cys Val Pro Gln Met Leu Val Asn Leu Trp Gly Pro Lys Lys Thr
Ile Ser Phe Leu Gly Cys Ser Val Gln Leu Phe Ile Phe Leu Ser Leu
Gly Thr Thr Glu Cys Ile Leu Leu Thr Val Met Ala Phe Asp Arg Tyr
Val Ala Val Cys Gln Pro Leu His Tyr Ala Thr Ile Ile His Pro Arg
                    70
                                        75
Leu Cys Trp Gln Leu Ala Ser Val Ala Trp Val Met Ser Leu Val Gln
                                    90
Ser Ile Val Gln Lys Pro Ser Thr Leu His Leu Pro Phe Cys Pro His
                                105
                                                    110
Gln Gln Ile Asp Asp Phe Leu Cys Glu Val Pro Ser Leu Ile Gly Leu
                            120
Ser Cys Gly Asp Thr Ser Tyr Asn Glu Ile Gln Leu Ala Val Ser Ser
                        135
Val Ile Phe Val Val Pro Leu Ser Leu Ile Leu Ala Tyr Tyr Gly
                    150
                                        155
Ala Thr Ala Gln Ala Val Leu Arg Ile Asn Ser Ala Thr Ala Trp Arg
                                    170
Lys Ala Phe Gly Thr Cys Ser Ser His Leu Thr Val Val Thr Leu Phe
                                185
Tyr Ser
<210> 2586
<211> 318
<213> Unknown (4160199-rev-489-12 conceptual translation of range 49035-
49987)
<400>2586
Gln Glu Gln Ala Met Val Asn Gln Ser Ser Thr Pro Gly Phe Leu Leu
Leu Gly Phe Ser Glu His Pro Gly Leu Glu Arg Thr Leu Phe Val Val
                                25
Val Phe Thr Ser Tyr Leu Leu Thr Leu Val Gly Asn Thr Leu Ile Ile
                            40
Leu Leu Ser Ala Leu Asp Pro Lys Leu His Ser Pro Met Tyr Phe Phe
Leu Ser Asn Leu Ser Phe Leu Asp Leu Cys Phe Thr Thr Ser Cys Val
                    70
Pro Gln Met Leu Val Asn Leu Trp Gly Pro Lys Lys Thr Ile Ser Phe
```

```
90
Leu Asp Cys Ser Val Gln Ile Phe Ile Phe Leu Ser Leu Gly Thr Thr
                                105
                                                    110
Glu Cys Ile Leu Leu Thr Val Met Ala Phe Asp Arg Tyr Val Ala Val
                            120
                                                125
Cys Gln Pro Leu His Tyr Ala Thr Ile Ile His Pro Arg Leu Cys Trp
                        135
Gln Leu Ala Ser Val Ala Trp Val Ile Gly Leu Val Glu Ser Val Val
                    150
                                       155
Gln Thr Pro Ser Thr Leu His Leu Pro Phe Cys Pro Asp Arg Gln Val
                165
                                    170
Asp Asp Phe Val Cys Glu Val Pro Ala Leu Ile Arg Leu Ser Cys Glu
            180
                                185
Asp Thr Ser Tyr Asn Glu Ile Gln Val Ala Val Ala Ser Val Phe Ile
                            200
Leu Val Val Pro Leu Ser Leu Ile Leu Val Ser Tyr Gly Ala Ile Thr
                        215
Trp Ala Val Leu Arg Ile Asn Ser Ala Lys Gly Arg Arg Lys Ala Phe
                    230
                                        235
Gly Thr Cys Ser Ser His Leu Thr Val Val Thr Leu Phe Tyr Ser Ser
                245
                                    250
Val Ile Ala Val Tyr Leu Gln Pro Lys Asn Pro Tyr Ala Gln Glu Arg
            260
                                265
Gly Lys Phe Phe Gly Leu Phe Tyr Ala Val Gly Thr Pro Ser Leu Asn
                            280
Pro Leu Ile Tyr Thr Leu Arg Asn Lys Glu Val Thr Arg Ala Phe Arg
                        295
                                            300
Arg Leu Leu Gly Lys Glu Met Gly Leu Thr Gln Ser Trp Arg
                    310
<210> 2587
<211> 320
<212> PRT
<213> Unknown (1041044-dir-3-13 conceptual translation of range 488-1447)
<400>2587
Gln Glu Gln Ala Met Asp Asn Gln Ser Ser Thr Pro Gly Phe Leu Leu
                                    10
Leu Gly Phe Ser Glu His Pro Gly Leu Gly Arg Thr Leu Phe Val Asp
                                25
Val Ile Thr Ser Tyr Leu Leu Thr Leu Val Gly Asn Thr Leu Ile Ile
                            40
Leu Leu Ser Ala Leu Asp Thr Lys Leu His Ser Pro Met Tyr Phe Phe
                       55
                                            60
Leu Ser Asn Leu Ser Phe Leu Asp Leu Cys Phe Thr Thr Ser Cys Val
                                        75
Pro Gln Met Leu Ala Asn Leu Trp Gly Pro Lys Lys Thr Ile Ser Phe
                                    90
Leu Asp Cys Ser Val Gln Ile Phe Ile Phe Leu Ser Leu Gly Thr Thr
            100
                                105
Glu Cys Ile Leu Met Lys Val Met Ala Phe Asp Arg Tyr Val Ala Val
                            120
                                                125
Cys Gln Pro Leu His Tyr Ala Thr Ile Ile His Pro Arg Leu Cys Trp
                        135
                                            140
Gln Leu Ala Ser Val Ala Trp Val Ile Gly Leu Val Gly Ser Val Val
                   150
                                        155
Gln Thr Pro Ser Thr Leu His Leu Pro Phe Cys Pro Asp Arg Gln Val
                                    170
Asp Asp Phe Val Cys Glu Val Pro Ala Leu Ile Arg Leu Ser Cys Glu
           180
                                185
Asp Thr Ser Tyr Asn Glu Ile Gln Val Ala Val Ala Ser Val Phe Ile
```

```
200
        195
Leu Val Val Pro Leu Ser Leu Ile Leu Val Ser Tyr Gly Ala Ile Thr
                        215
                                            220
Trp Ala Val Leu Arg Ile Asn Ser Ala Thr Ala Trp Arg Lys Ala Phe
                    230
                                        235
Gly Thr Cys Ser Ser His Leu Thr Val Val Thr Leu Phe Tyr Ser Ser
                                    250
                245
Val Ile Ala Val Tyr Leu Gln Pro Lys Asn Pro Tyr Ala Gln Gly Arg
            260
                                265
Gly Lys Phe Phe Gly Leu Phe Tyr Ala Val Gly Thr Pro Ser Leu Asn
                           280
Pro Leu Val Tyr Thr Leu Arg Asn Lys Glu Ile Lys Arg Ala Leu Arg
                       295
Arg Leu Leu Gly Lys Glu Arg Asp Ser Arg Glu Ser Trp Arg Ala Ala
                    310
<210> 2588
<211> 316
<212> PRT
<213> Unknown (3093312-dir-1364-13 conceptual translation of range 136584-
137530)
<400>2588
Val Ala Met Ile Ile Cys Asn Asp Ser His Ser Asp Phe Ile Leu
                                    10
Leu Gly Phe Ser Asn Lys Pro His Leu Glu Lys Ile Leu Phe Val Ile
                                25
Ile Phe Ile Phe Tyr Phe Leu Thr Leu Ala Gly Asn Met Val Ile Val
Leu Val Ser Leu Lys Asp Pro Lys Leu His Ile Pro Met Tyr Phe Phe
                        55
Leu Ser Asn Leu Ser Leu Val Asp Leu Cys Leu Thr Ser Ser Cys Val
                    70
                                        75
Pro Gln Met Leu Ile Asn Phe Trp Gly Pro Glu Lys Thr Ile Ser Tyr
                                    90
Ile Gly Cys Ala Ile Gln Leu Tyr Val Phe Leu Trp Leu Gly Ala Thr
                               105
Glu Tyr Val Leu Leu Val Val Met Ala Val Asp Cys Tyr Val Ala Val
                           120
                                                125
Cys His Pro Leu Gln Asn Thr Met Ile Met His Pro Lys Leu Cys Leu
                        135
                                           140
Gln Leu Ala Ile Leu Ala Trp Gly Thr Gly Leu Ala Gln Ser Leu Ile
                   150
                                       155
Gln Ser Pro Ala Thr Leu Arg Leu Pro Phe Cys Ser Gln Arg Met Val
                                    170
                165
Asp Asp Val Val Cys Glu Val Pro Ala Leu Ile Gln Leu Ser Ser Thr
                               185
            180
Asp Thr Thr Tyr Ser Glu Ile Gln Met Ser Ile Ala Ser Val Val Leu
       195
                            200
                                                205
Leu Val Met Pro Leu Ile Ile Leu Ser Ser Ser Gly Ala Ile Ala
                        215
                                            220
Lys Ala Val Leu Arg Ile Lys Ser Thr Ala Gly Gln Lys Lys Ala Phe
                   230
                                        235
Gly Thr Cys Ile Ser His Leu Leu Val Val Ser Leu Phe Tyr Gly Thr
                245
                                    250
Val Thr Gly Val Tyr Leu Gln Pro Lys Asn His Tyr Pro His Glu Trp
            260
                               265
                                                    270
Gly Lys Phe Leu Thr Leu Phe Tyr Thr Val Val Thr Pro Thr Leu Asn
                           280
       275
                                                285
Pro Leu Ile Tyr Thr Leu Arg Asn Lys Glu Val Lys Gly Ala Leu Ile
                                            300
                       295
```

```
Arg Leu Gly Arg Arg Thr Trp Asp Ser Gln Asn Asn
                   310
<210> 2589
<211> 348
<212> PRT
<213> Unknown (5262456-dir-612-12 conceptual translation of range 61285-
<220>
<221> VARIANT
<222> (1)...(348)
<223> Xaa = Any Amino Acid
<400>2589
Leu Ile Phe Cys Pro Met Ala Asn Thr Leu Ser Ser Leu Asn Ser Cys
                                   10
Asn Val Phe Leu Leu Val Leu Asn Arg Val Met Gly Met Thr Asn Ser
           20
                               25
Ser Val Lys Gly Asp Phe Ile Leu Val Gly Phe Ser His Gln Pro His
                           40
       35
Leu Glu Lys Ile Leu Phe Val Ala Val Leu Ile Ser Tyr Leu Leu Thr
                       55
                                           60
Leu Val Gly Asn Thr Val Ile Ile Leu Ile Cys Ser Val Asp Pro Lys
                                       75
                   70
Leu Lys Thr Pro Met Tyr Phe Phe Leu Ser His Leu Ser Leu Val Asp
               85
Ile Cys Phe Thr Thr Ser Ile Val Pro Gln Leu Leu Trp Asn Leu Lys
                               105
                                                   110
           100
Gly Pro Asp Lys Thr Ile Thr Phe Leu Gly Cys Val Ile Gln Leu Tyr
                                               125
                           120
       115
Ile Ser Leu Ala Leu Gly Ser Thr Glu Cys Val Leu Leu Ala Val Met
                       135
                                           140
Ala Phe Asp Arg Tyr Ala Ala Val Cys Lys Pro Leu His Tyr Thr Ala
                   150
                                       155
Val Met Asn Pro Gln Leu Cys Gln Ala Leu Ala Gly Val Ala Trp Leu
                                   170
                                                       175
               165
Ser Gly Val Gly Asn Thr Leu Ile Gln Gly Thr Val Thr Leu Trp Leu
           180
                               185
                                                   190
Pro Arg Cys Gly His Arg Leu Leu Gln His Phe Phe Cys Glu Val Pro
                                            205
                           200
Ser Met Ile Lys Leu Ala Cys Val Asp Ile His Asp Asn Glu Val Gln
                                           220
                      215
Leu Phe Val Ala Ser Leu Val Leu Leu Leu Pro Leu Val Leu Ile
                                       235
                   230
Leu Leu Ser Tyr Gly His Ile Ala Lys Val Val Ile Arg Ile Lys Ser
                                  250 .
              245
Val Gln Ala Trp Cys Lys Gly Leu Gly Thr Cys Gly Ser His Leu Ile
                                                   270
                               265
          260
Val Val Ser Leu Phe Cys Gly Thr Ile Thr Ala Val Tyr Ile Gln Ser
                                               285
                           280
Asn Ser Ser Tyr Ala His Ala His Gly Lys Phe Ile Ser Leu Phe Tyr
   290
                       295
                                           300
Thr Val Val Thr Pro Thr Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn
                                       315
305
                   310
Asn Asp Val Lys Gly Ala Leu Arg Leu Phe Asn Arg Asp Leu Gly Thr
               325
                                   330
Xaa Lys Met Lys Gln Ser Thr Gln Arg Ser Thr Phe
                               345
```

<210> 2590

```
<211> 312
<212> PRT
<213> Unknown (200153-dir-0-11 conceptual translation of range 1-936)
Met Glu Val Asp Ser Asn Ser Ser Ser Gly Thr Phe Ile Leu Met Gly
                                    10
Val Ser Asp His Pro His Leu Glu Ile Ile Phe Phe Ala Val Ile Leu
                               25
           20
Ala Ser Tyr Leu Leu Thr Leu Val Gly Asn Leu Thr Ile Ile Leu Leu
                                                45
Ser Arg Leu Asp Ala Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                                            60
Asn Leu Ser Ser Leu Asp Leu Ala Phe Thr Thr Ser Ser Val Pro Gln
                   70
                                       75
Met Leu Lys Asn Leu Trp Gly Pro Asp Lys Thr Ile Ser Tyr Gly Gly
               85
                                   90
Cys Val Thr Gln Leu Tyr Val Phe Leu Trp Leu Gly Ala Thr Glu Cys
                                                    110
                               105
           100
Ile Leu Leu Val Val Met Ala Phe Asp Arg Tyr Val Ala Val Cys Arg
                           120
                                                125
       115
Pro Leu His Tyr Met Thr Val Met Asn Pro Arg Leu Cys Trp Gly Leu
                                            140
                       135
Ala Ala Ile Ser Trp Leu Gly Gly Leu Gly Asn Ser Val Ile Gln Ser
                                        155
                   150
Thr Phe Thr Leu Gln Leu Pro Phe Cys Gly His Arg Lys Val Asp Asn
                                    170
                                                        175
Phe Leu Cys Glu Val Pro Ala Met Ile Lys Leu Ala Cys Gly Asp Thr
                                185
Ser Leu Asn Glu Ala Val Leu Asn Gly Val Cys Thr Phe Phe Thr Val
                            200
Val Pro Val Ser Val Ile Leu Val Ser Tyr Cys Phe Ile Ala Gln Ala
                       215
                                            220
Val Met Lys Ile Arg Ser Val Glu Gly Arg Arg Lys Ala Phe Asn Thr
                                        235
                    230
Cys Val Ser His Leu Val Val Val Phe Leu Phe Tyr Gly Ser Ala Ile
                245
                                    250
Tyr Gly Tyr Leu Leu Pro Ala Lys Ser Ser Asn Gln Ser Gln Gly Lys
                                                    270
                               265
Phe Ile Ser Leu Phe Tyr Ser Val Val Thr Pro Met Val Asn Pro Leu
                           280
                                                285
Ile Tyr Thr Leu Arg Asn Lys Glu Val Lys Gly Ala Leu Gly Arg Leu
                       295
Leu Gly Lys Gly Arg Gly Ala Ser
<210> 2591
<211> 157
<212> PRT
<213> Unknown (902728-dir-0-6 conceptual translation of range 2-472)
Val Cys Arg Pro Leu His Tyr Met Thr Val Met Asn Pro Arg Leu Cys
                                    10
Trp Val Leu Ala Ala Ile Ser Trp Leu Gly Gly Leu Gly Asn Ser Val
                                25
Ile Gln Ser Thr Phe Thr Leu Gln Leu Pro Phe Cys Gly His Arg Lys
                            40
Val Asp Asn Phe Leu Cys Glu Val Pro Ala Met Ile Lys Leu Ala Cys
                      55
Gly Asp Thr Ser Leu Asn Glu Ala Val Leu Asn Gly Val Cys Thr Phe
```

```
70
                                      75
Phe Thr Ala Val Pro Leu Ser Ile Ile Leu Val Ser Tyr Cys Phe Ile
              85
                               90
Ala Gln Ala Val Met Lys Ile Arg Ser Val Glu Gly Arg Arg Lys Ala
                             105
          100
Phe Asn Thr Cys Val Ser His Leu Val Val Val Phe Leu Phe Tyr Gly
                                             125
                          120
      115
Ser Ala Ile Tyr Gly Tyr Leu Leu Pro Ala Lys Ser Ser Asn Gln Asp
                                        140
                      135
Gln Gly Lys Phe Ile Ser Leu Phe Tyr Ser Val Val Thr
                150
<210> 2592
<211> 312
<212> PRT
<213> Unknown (p146-dir-0-11 conceptual translation of range 1-936)
<400>2592
Met Asp Gly Val Asn Asp Ser Ser Leu Gln Gly Phe Val Leu Met Ser
                       10
       5
Ile Ser Asp His Pro Gln Leu Glu Met Ile Phe Phe Ile Ala Ile Leu
                              25
          20
Phe Ser Tyr Leu Leu Thr Leu Leu Gly Asn Ser Thr Ile Ile Leu Leu
                       40 .
                                  45
Ser Arg Leu Glu Ala Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                      55
Asn Leu Ser Ser Leu Asp Leu Ala Phe Ala Thr Ser Ser Val Pro Gln
                                     75
                  70
Met Leu Ile Asn Leu Trp Gly Pro Gly Lys Thr Ile Ser Tyr Gly Gly
                                 90
Cys Ile Thr Gln Leu Tyr Val Phe Leu Trp Leu Gly Ala Thr Glu Cys
                             105
                                                 110
          100
Ile Leu Leu Val Val Met Ala Phe Asp Arg Tyr Val Ala Val Cys Arg
                                             125
                          120
Pro Leu Arg Tyr Thr Ala Ile Met Asn Pro Gln Leu Cys Trp Leu Leu
                                         140
                      135
Ala Val Ile Ala Trp Leu Gly Gly Leu Gly Asn Ser Val Ile Gln Ser
                                     155
                  150
Thr Phe Thr Leu Gln Leu Pro Leu Cys Gly His Arg Arg Val Glu Gly
                                 170
              165
Phe Leu Cys Glu Val Pro Ala Met Ile Lys Leu Ala Cys Gly Asp Thr
                                                190
                             185
Ser Leu Asn Gln Ala Val Leu Asn Gly Val Cys Thr Phe Phe Thr Ala
                                              205
                         200
Val Pro Leu Ser Ile Ile Val Ile Ser Tyr Cys Leu Ile Ala Gln Ala
                                         220
                      215
Val Leu Lys Ile His Ser Ala Glu Gly Arg Arg Lys Ala Phe Asn Thr
                  230
                                      235
Cys Leu Ser His Leu Leu Val Val Phe Leu Phe Tyr Gly Ser Ala Ser
                                  250
               245
Tyr Gly Tyr Leu Leu Pro Ala Lys Asn Ser Lys Gln Asp Gln Gly Lys
                              265
           260
Phe Ile Ser Leu Phe Tyr Ser Leu Val Thr Pro Met Val Asn Pro Leu
                         280
                                             285
Ile Tyr Thr Leu Arg Asn Met Glu Val Lys Gly Ala Leu Arg Arg Leu
                                300
                      295
Leu Gly Lys Gly Arg Glu Val Gly
                  310
<210> 2593
<211> 216
```

1575

```
<212> PRT
<213> Unknown (2921701-dir-0-8 conceptual translation of range 2-648)
Leu Leu Asp Leu Cys Tyr Thr Thr Cys Thr Val Pro Gln Met Leu Val
                                   10
Asn Leu Cys Ser Ile Arg Lys Val Ile Ser Tyr Arg Gly Cys Val Ala
                               25
Gln Leu Phe Ile Phe Leu Ala Leu Gly Ala Thr Glu Tyr Leu Leu Leu
                           40
                                                45
Ala Val Met Ser Phe Asp Arg Phe Val Ala Ile Cys Arg Pro Leu His
                       55
Tyr Ser Val Ile Met His Gln Arg Leu Cys Leu Gln Leu Ala Ala Ala
                                       75
                   70
Ser Arg Val Thr Gly Phe Ser Asn Ser Val Trp Leu Ser Thr Leu Thr
                                   90
               85
Leu Gln Leu Pro Leu Cys Asp Pro Tyr Val Ile Asp His Phe Leu Cys
                               105
           100
Glu Val Pro Ala Leu Leu Lys Leu Ser Cys Val Glu Thr Thr Ala Asn
                           120
Glu Ala Glu Leu Phe Leu Val Ser Glu Leu Phe His Leu Ile Pro Leu
                       135
Thr Leu Ile Leu Ile Ser Tyr Ala Phe Ile Val Arg Ala Val Leu Arg
                   150
                                       155
Ile Gln Ser Ala Glu Gly Arg Gln Lys Ala Phe Gly Thr Cys Gly Ser
                                   170
               165
His Leu Ile Val Val Ser Leu Phe Lys Gly Thr Ala Val Ser Val Tyr
           180
                               185
Leu Gln Pro Pro Ser Pro Ser Ser Lys Asp Gln Gly Lys Met Val Ser
                           200
Leu Phe Tyr Gly Ile Ile Ala Pro
<210> 2594
<211> 216
<212> PRT
<213> Unknown (2921699-dir-0-8 conceptual translation of range 2-649)
<400>2594
Leu Leu Asp Leu Cys Tyr Thr Thr Cys Thr Val Pro Gln Met Leu Val
                                    10
Asn Leu Cys Ser Ile Arg Lys Val Ile Ser Tyr Arg Gly Cys Val Ala
Gln Leu Phe Ile Phe Leu Ala Leu Gly Ala Thr Glu Tyr Leu Leu Leu
                           40
Ala Val Met Ser Phe Asp Arg Phe Val Ala Ile Cys Arg Pro Leu His
                       55
Tyr Ser Val Ile Met His Gln Arg Leu Cys Leu Gln Leu Ala Ala Ala
                   70
                                       75
Ser Trp Val Thr Gly Phe Ser Asn Ser Val Trp Leu Ser Thr Leu Thr
                                    90
Leu Gln Leu Pro Leu Cys Asp Pro Tyr Val Ile Asp His Phe Leu Cys
                               105
Glu Val Pro Ala Leu Leu Lys Leu Ser Cys Val Glu Thr Thr Ala Asn
                           120
Glu Ala Glu Leu Phe Leu Val Ser Glu Leu Phe His Leu Ile Pro Leu
                       135
Thr Leu Ile Leu Ile Ser Tyr Ala Phe Ile Val Arg Ala Val Leu Arg
                   150
                                      155
Ile Gln Ser Ala Glu Gly Arg Gln Lys Ala Phe Gly Thr Cys Gly Ser
                                   170
```

```
His Leu Ile Val Val Ser Leu Phe Tyr Ser Thr Ala Val Ser Val Tyr
            180
                               185
Leu Gln Pro Pro Ser Pro Ser Lys Asp Gln Gly Lys Met Val Ser
                            200
Leu Phe Tyr Gly Ile Ile Ala Pro
<210> 2595
 <211> 215
 <212> PRT
<213> Unknown (2921706-dir-0-8 conceptual translation of range 2-646)
<220>
<221> VARIANT
<222> (1)...(215)
<223> Xaa = Any Amino Acid
Leu Leu Asp Leu Cys Tyr Thr Thr Cys Thr Val Pro Gln Met Leu Val
                 5
Asn Leu Cys Ser Ile Arg Lys Val Ile Ser Tyr Arg Gly Cys Val Ala
            20
                                25
                                                    30
Gln Leu Phe Ile Phe Leu Ala Leu Gly Ala Thr Glu Tyr Leu Leu Leu
                            40
                                                45
Ala Val Thr Ser Leu Ile Gly Cys Ser Tyr Cys Arg Pro Leu His Tyr
                        55
                                            60
Ser Val Ile Met His Gln Arg Leu Cys Leu Gln Leu Ala Ala Ser
                    70
Trp Val Thr Gly Phe Ser Asn Ser Val Trp Leu Ser Thr Leu Thr Leu
                85
                                    90
Gln Leu Pro Leu Cys Asp Pro Tyr Val Ile Asp His Phe Leu Cys Glu
            100
                                105
                                                    110
Val Pro Ala Leu Leu Lys Leu Ser Cys Val Glu Thr Thr Ala Asn Glu
                           120
                                                125
Ala Glu Leu Phe Leu Asp Ser Glu Leu Phe His Leu Ile Pro Leu Thr
                        135
                                            140
Leu Ile Leu Ile Ser Tyr Ala Phe Ile Val Arg Ala Val Leu Arg Ile
                   150
                                        155
Gln Ser Ala Glu Gly Arg Gln Lys Ala Phe Gly Thr Cys Gly Ser His
                165
                                    170
                                                        175
Leu Ile Val Val Ser Leu Phe Tyr Ser Thr Ala Val Ser Val Tyr Leu
                                185
                                                    190
Xaa Pro Pro Ser Pro Ser Ser Lys Asp Gln Gly Lys Met Val Ser Leu
       195
                            200
                                                205
Phe Tyr Gly Ile Ile Ala Pro
    210
                        215
<210> 2596
<211> 112
<212> PRT
<213> Unknown (1142995-dir-0-5 conceptual translation of range 1-336)
<400>2596
Arg Pro Leu His Tyr Ser Val Ile Met His Gln Arg Leu Cys Leu Gln
                                    10
Leu Ala Ala Val Ser Trp Ile Ile Gly Phe Gly Asn Ser Val Trp Leu
           20
                                25
Ser Ile Leu Thr Leu Gln Leu Pro Arg Cys Gly His Tyr Val Ile Asp
                           40
                                                45
His Phe Leu Cys Glu Val Pro Ala Leu Leu Lys Leu Ser Cys Val Asp
   50
                        55
```

```
Val Thr Ala Asn Glu Ala Glu Leu Phe Phe Val Ser Val Phe Phe His
                    70
Leu Thr Pro Leu Ser Leu Ile Leu Thr Ser Tyr Ala Phe Ile Ala Arg
                                    90
Ala Ile Leu Lys Ile Gln Ser Ala Glu Gly Arg Gln Lys Ala Phe Gly
                                105
<210> 2597
<211> 314
<212> PRT
<213> Unknown (3080457-rev-750-12 conceptual translation of range 75137-
<400>2597
Asn Met Asn Trp Val Asn Lys Ser Val Pro Gln Glu Phe Ile Leu Leu
                                    10
Val Phe Ser Asp Gln Pro Trp Leu Glu Ile Pro Pro Phe Val Met Phe
                                25
Leu Phe Ser Tyr Ile Leu Thr Ile Phe Gly Asn Leu Thr Ile Ile Leu
                            40
                                                45
Val Ser His Val Asp Phe Lys Leu His Thr Pro Met Tyr Phe Phe Leu
                        55
                                            60
Ser Asn Leu Ser Leu Leu Asp Leu Cys Tyr Thr Thr Ser Thr Val Pro
                    70
                                        75
Gln Met Leu Val Asn Ile Cys Asn Thr Arg Lys Val Ile Ser Tyr Gly
Gly Cys Val Ala Gln Leu Phe Ile Phe Leu Ala Leu Gly Ser Thr Glu
                                105
Cys Leu Leu Leu Ala Val Met Cys Phe Asp Arg Phe Val Ala Ile Cys
                            120
                                                125
Arg Pro Leu His Tyr Ser Ile Ile Met His Gln Arg Leu Cys Phe Gln
                        135
                                            140
Leu Ala Ala Ser Trp Ile Ser Gly Phe Ser Asn Ser Val Leu Gln
                    150
                                        155
Ser Thr Trp Thr Leu Lys Met Pro Leu Cys Gly His Lys Glu Val Asp
                                    170
His Phe Phe Cys Glu Val Pro Ala Leu Leu Lys Leu Ser Cys Val Asp
                                185
Thr Thr Ala Asn Glu Ala Glu Leu Phe Phe Ile Ser Val Leu Phe Leu
                            200
                                                205
Leu Ile Pro Val Thr Leu Ile Leu Ile Ser Tyr Ala Phe Ile Val Gln
                        215
                                            220
Ala Val Leu Arg Ile Gln Ser Ala Glu Gly Gln Arg Lys Ala Phe Gly
                   230
                                        235
Thr Cys Gly Ser His Leu Ile Val Val Ser Leu Phe Tyr Gly Thr Ala
                                    250
                245
Ile Ser Met Tyr Leu Gln Pro Pro Ser Pro Ser Ser Lys Asp Arg Gly
                                265
Lys Met Val Ser Leu Phe Cys Gly Ile Ile Ala Pro Met Leu Asn Pro
                            280
                                                285
Leu Ile Tyr Thr Leu Arg Asn Lys Glu Val Lys Glu Ala Phe Lys Arg
                        295
                                            300
Leu Leu Gln Arg Val Phe Leu Ile Lys Lys
                    310
<210> 2598
<211> 343
<213> Unknown (506841-dir-0-12 conceptual translation of range 60-1090)
<220>
```

```
<222> (1)...(343)
<223> Xaa = Any Amino Acid
<400>2598
Cys Ile Ile Tyr Met Ser Val Ala Asn Glu Ser Ile Ser Arg Glu Phe
                                   10
Ile Leu Leu Gly Phe Ser Asp Arg Pro Trp Leu Glu Leu Pro Leu Phe
           20
                               25
Val Val Phe Leu Val Ser Tyr Ile Leu Thr Ile Phe Gly Asn Met Met
                           40
Ile Ile Leu Val Ser Arg Leu Asp Ser Lys Leu His Thr Pro Met Tyr
                       55
                                           60
Phe Phe Leu Thr Asn Leu Ser Leu Leu Asp Leu Cys Tyr Thr Thr Ser
                   70
                                       75
Thr Val Pro Gln Met Leu Ile Asn Ile Cys Ser Thr Arg Lys Val Ile
                                   90
               85
Ser Tyr Gly Gly Cys Val Val Gln Leu Phe Ile Phe Leu Ser Leu Gly
                                105
                                                    110
Ser Thr Glu Cys Phe Leu Leu Gly Val Met Ser Leu Asp Arg Phe Leu
                            120
                                                125
Ala Ile Cys Arg Pro Leu His Tyr Ser Val Ile Met His Gln Arg Arg
                        135
Cys Leu His Leu Ala Ala Cys Trp Ile Ser Gly Phe Ser Asn Ser
                   150
                                        155
Val Leu Gln Ser Thr Trp Thr Leu Gln Met Pro Leu Cys Gly His Lys
                                    170
Glu Val Asp His Phe Phe Cys Glu Val Pro Ala Leu Leu Lys Leu Ser
                               185
Cys Val Asp Thr Thr Ala Asn Glu Ala Glu Leu Phe Phe Ile Ser Val
                            200
                                               205
Leu Phe Leu Leu Ile Pro Val Thr Leu Ile Leu Ile Ser Tyr Ala Phe
                       215
                                           220
Ile Val Gln Ala Val Leu Lys Ile Arg Ser Ala Glu Cys Arg Arg Lys
                   230
                                        235
Ala Phe Gly Thr Cys Gly Ser His Leu Ile Val Val Leu Phe Tyr
                                    250
                245
Gly Thr Ala Ile Tyr Met Tyr Leu Gln Pro Pro Ser Pro Ser Ser Lys
           260
                               265
                                                   270
Asp Arg Gly Lys Met Val Ser Leu Phe Tyr Gly Ile Ile Thr Pro Met
     275
                           280
                                               285
Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Glu Glu Val Lys Gly Ala
                       295
                                           300
Phe Lys Arg Leu Met Lys Arg Ile Ile Leu Ile Gly Lys Xaa Gly Val
                  310
                                       315
Pro Glu Xaa Xaa Pro Tyr Xaa Tyr Lys Tyr Ile Phe Ile Ala Cys Lys
               325
                                  330
Leu Tyr Cys Phe Leu Leu Cys
           340
                                                             ٠,٠
<210> 2599
<211> 348
<212> PRT
<213> Unknown (3093312-rev-75-13 conceptual translation of range 7680-8721)
<220>
<221> VARIANT
<222> (1)...(348)
<223> Xaa = Any Amino Acid
<400>2599
```

<221> VARIANT

```
Leu Ile Ala Phe Leu Ser Tyr Ile Phe Leu Gly Val Arg Asn Lys Xaa
Val Ile Met Asn Trp Glu Asn Glu Ser Ser Pro Lys Glu Phe Ile Leu
Leu Gly Phe Ser Asp Arg Ala Trp Leu Gln Met Pro Leu Phe Val Val
                            40
Leu Leu Ile Ser Tyr Thr Ile Thr Ile Phe Gly Asn Val Ser Ile Met
                        55
Met Val Cys Ile Leu Asp Pro Lys Leu His Thr Pro Met Tyr Phe Phe
                    70
                                        75
Leu Thr Asn Leu Ser Ile Leu Asp Leu Cys Tyr Thr Thr Thr Val
                                    90
                85
Pro His Met Leu Val Asn Ile Gly Cys Asn Lys Lys Thr Ile Ser Tyr
                                105
            100
Ala Gly Cys Val Ala His Leu Ile Ile Phe Leu Ala Leu Gly Ala Thr
                            120
        115
Glu Cys Leu Leu Ala Val Met Ser Phe Asp Arg Tyr Val Ala Val
                       135
Cys Arg Pro Leu His Tyr Val Val Ile Met Asn Tyr Trp Phe Cys Leu
                   150
                                       155
Arg Met Ala Ala Phe Ser Trp Leu Ile Gly Phe Gly Asn Ser Val Leu
                                    170
Gln Ser Ser Leu Thr Leu Asn Met Pro Arg Cys Gly His Gln Glu Val
            180
                               185
Asp His Phe Phe Cys Glu Val Pro Ala Leu Leu Lys Leu Ser Cys Ala
                            200
                                                205
Asp Thr Lys Pro Ile Glu Ala Glu Leu Phe Phe Phe Ser Val Leu Ile
                        215
                                            220
Leu Leu Ile Pro Val Thr Leu Ile Leu Ile Ser Tyr Gly Phe Ile Ala
                    230
                                        235
Gln Ala Val Leu Lys Ile Arg Ser Ala Glu Gly Arg Gln Lys Ala Phe
                                    250
Gly Thr Cys Gly Ser His Met Ile Val Val Ser Leu Phe Tyr Gly Thr
            260
                                265
                                                    270
Ala Ile Tyr Met Tyr Leu Gln Pro Pro Ser Ser Thr Ser Lys Asp Trp
        275
                            280
                                                285
Gly Lys Met Val Ser Leu Phe Tyr Gly Ile Ile Thr Ser Met Leu Asn
                        295
                                            300
Ser Leu Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys Glu Ala Phe Lys
                    310
                                       315
Arg Leu Met Pro Arg Ile Phe Phe Cys Lys Xaa Arg Ser Thr Pro
                                    330
Ser Val Met Arg Ile Phe Leu Val Phe Pro Tyr Leu
            340
<210> 2600 -
<211> 272
<212> PRT
<213> Unknown (5262456-rev-0-10 conceptual translation of range 184-1000)
<400>2600
Met Trp Ile Asn Asn Gln Ser Ser Leu Asp Asp Phe Ile Leu Leu Gly
                                    10
Phe Ser Asp Arg Pro Trp Leu Glu Thr Pro Leu Val Ile Phe Leu Val
                                25
            20
Ala Tyr Ile Phe Ser Leu Phe Gly Asn Ile Ser Ile Ile Leu Val Ser
His Leu Asp Pro Gln Leu Asp Ser Pro Met Tyr Phe Phe Val Ser Asn
                                            60
                        55
Leu Ser Phe Leu Asp Leu Cys Tyr Thr Thr Ser Thr Val Pro Gln Met
                                        75
```

```
Leu Val Asn Leu Arg Gly Pro Glu Lys Thr Ile Ser Tyr Gly Gly Cys
              85
Val Ala Gln Leu Tyr Ile Phe Leu Ala Leu Gly Ser Thr Glu Cys Ile
                               105
           100
Leu Leu Ala Ile Met Ala Phe Asp Arg Tyr Ala Ala Ile Cys Lys Pro
                                              125
                           120
Leu His Tyr Pro Val Ile Met Asn His Arg Arg Cys Ile His Met Ala
                                          140
                      135
Ala Gly Thr Trp Ile Ser Gly Phe Ala Asn Ser Leu Val Gln Ser Thr
                                      155
                  150
Leu Thr Val Val Ala Pro Arg Cys Gly Gln Arg Val Leu Asp His Phe
               165
                       170
Phe Cys Glu Val Pro Ala Leu Leu Lys Leu Ala Cys Ile Asp Ile Arg
                   185
                                                 190
Val Asn Glu Met Glu Leu Asn Val Leu Gly Ala Leu Leu Leu Met
                           200
       195
Pro Leu Thr Leu Ile Leu Gly Thr Tyr Val Phe Ile Ala Gln Ala Val
                                           220
                       215
Met Arg Ile Cys Ser Ala Glu Ser Arg Trp Lys Ala Phe Asn Thr Cys
                                       235
                   230
Ala Ser His Leu Leu Val Val Ser Leu Phe Tyr Phe Thr Ala Ile Ser
                                  250
               245
Met Tyr Val Gln Pro Pro Ser Ser Tyr Ser His Asp Arg Gly Lys Ile
                               265
<210> 2601
<211> 350
<213> Unknown (3093312-dir-1027-12 conceptual translation of range 102817-
103865)
<220>
<221> VARIANT
<222> (1)...(350)
<223> Xaa = Any Amino Acid
<400>2601
Phe Leu Ser Gly Asn Arg Lys Xaa Met Met Glu Lys Xaa Asn Ala
              5
                          10
Ser Ser Glu Gly Tyr Phe Ile Leu Val Gly Phe Ser Asn Trp Pro Tyr
                              25
          20
Leu Glu Val Val Leu Phe Val Val Ile Leu Ile Phe Cys Leu Met Thr
                                              45
                           40
Leu Ile Gly Asn Leu Phe Ile Ile Ile Leu Thr Tyr Leu Asp Ser His
                       55
                                           60
Leu His Thr Pro Leu Tyr Phe Phe Leu Ser Asn Leu Ser Phe Leu Asp
                                      75
                   70
Leu Cys Tyr Thr Thr Ser Ser Ile Pro Gln Leu Leu Val Ser Leu Trp
                                   90
Gly Val Glu Lys Thr Ile Ser Tyr Ala Gly Cys Met Val Gln Leu Tyr
                              105
Phe Phe Leu Thr Leu Gly Thr Thr Glu Cys Val Leu Leu Val Val Met
                           120
                                              125
Ser Tyr Asp Arg Tyr Ala Ala Val Cys Arg Pro Leu His Tyr Thr Val
                                          140
                      135
Leu Met His Ser Arg Phe Cys His Leu Leu Ala Val Ala Ser Trp Val
                   150
                                      155
Ser Gly Phe Thr Asn Pro Ala Leu His Ser Ser Phe Thr Phe Trp Val
                                                     175
                                  170
               165
Pro Leu Cys Gly His Arg Gln Ile Asp His Phe Phe Cys Glu Val Pro
           180
                              185
```

```
Ala Leu Leu Xaa Leu Ser Phe Val Asn Thr Arg Glu Asn Lys Leu Thr
                          200
Leu Met Ile Thr Ser Ser Ile Phe Val Leu Leu Leu Thr Leu Ile
                       215
                                            220
Phe Thr Ser Tyr Gly Ala Ile Ala Gln Ala Val Leu Arg Met Gln Ser
                   230
                                       235
Thr Thr Gly Leu Gln Lys Val Phe Gly Thr Cys Gly Ala His His Met
                                    250
Val Val Ser Leu Phe Phe Ile Pro Ala Met Cys Met Tyr Leu Gln Pro
                              265
Pro Ser Gly Asn Ser Gln Asp Gln Gly Lys Phe Ile Ala Leu Phe Tyr
                          280
        275
                                               285
Thr Val Val Thr Pro Ser Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn
                                            300
                       295
Lys Asp Val Arg Gly Val Val Lys Arg Leu Arg Gly Trp Glu Xaa Ala
                   310
                                        315
Cys Val Cys Val Ile Leu Thr Ile Xaa Trp Ser Leu Ser Ser Gln Xaa
                                    330
               325
Phe Ile His Leu Phe Ile Tyr Gln Pro Phe Phe Tyr Ser Leu
<210> 2602
<211> 205
<212> PRT
<213> Unknown (5262456-dir-273-9 conceptual translation of range 27452-28066)
Gln Lys Ile Ala Lys Met Ile Asn Asp Ser Tyr Phe Gly Trp Leu Met
                                    10
Leu Leu Gly Phe Pro Gly Lys Pro Gln Leu Glu Met Ile Ile Ser Gly
                               25
Val Val Phe Phe Phe Tyr Ala Ile Ser Leu Met Gly Asn Met Val Leu
Ile Leu Leu Pro Leu Leu Asp Lys His Leu Gln Thr Pro Ile Tyr Phe
                       55
                                           60
Phe Leu Arg Asn Leu Ala Ile Leu Asp Leu Cys Tyr Thr Thr Asn Ile
                   70
                                        75
Val Pro Gln Met Leu Val Asn Ala Trp Gly Lys Asp Lys Lys Ile Thr
                                   90
               85
Phe Gly Gly Cys Ala Phe Gln Leu Phe Thr Asn Val Thr Leu Cys Thr
                               105
            100
Val Glu Cys Met Leu Leu Ala Val Met Ser Tyr Asp Pro Phe Asn Ala
                           120
Val Cys Lys Pro Leu Asp Tyr Met Thr Ile Met Asn Pro Gln Leu Cys
                       135
                                            140
Gln Gly Leu Val Ala Met Thr Trp Leu Ile Gly Val Thr Asn Cys Met
                   150
                                       155
Ile Leu Ser Pro Cys Pro Val Ser Leu Pro Arg Cys Gly Asp His His
               165
                                   170
Leu Asp His Tyr Phe Cys Glu Ile Ser Ala Met Val Lys Ile Ala Cys
                              185
           180
Gly Ala Thr Thr Val Met Glu Glu Thr Val Arg Val Lys
                           200
<210> 2603
<211> 210
<212> PRT
<213> Unknown (2924249-rev-741-9 conceptual translation of range 74285-74912)
<220>
```

<221> VARIANT

<222> (1)...(210) <223> Xaa = Any Amino Acid <400>2603 Ser Val Lys Tyr Leu Asn Glu Ser Phe Pro Glu Asp Phe Ile Leu Met Gly Phe Val Lys Tyr Pro Trp Leu Asp Phe Leu Leu Phe Cys Val Leu Leu Thr Phe Tyr Met Phe Thr Leu Leu Gly Asn Ser Ala Ile Ile Leu 40 Val Ser Gln Leu Asp Ser Gln Leu His Ser Pro Met Tyr Phe Leu Leu 55 Thr Ser Leu Ser Val Leu Tyr Leu Cys Phe Thr Thr Thr Val Pro 75 70 Gln Met Leu Phe Asn Leu Gly Gly Thr Asn Lys Asn Ile Thr Xaa Ile 90 Gly Cys Met Ala Gln Ala Tyr Val Phe His Trp Leu Ala Cys Ile Glu 105 110 Cys Val Leu Leu Gly Ile Val Ala Leu Asp Cys Tyr Val Ala Val Cys 125 120 Lys Pro Pro Arg Tyr Thr Ile Ile Ile Asp His Lys Val Cys Leu His 135 140 Leu Ser Ser Thr Ala Trp Leu Ile Gly Leu Ala Asn Ser Leu Leu Gln 150 155 Ser Thr Ile Thr Ile Gln Leu Pro Leu Xaa Arg Cys Ile Ala Gln Ile 170 165 Phe Leu Xaa Leu Glu Ser Val Thr Xaa Gln Ser Leu Thr Val Thr Tyr 180 185 Leu Xaa Asp Leu Leu Gln His Ser Ile Xaa Gly Gln Leu His Ala Gly 200 195 Glu Leu 210 <210> 2604 <211> 210 <213> Unknown (4156137-rev-1191-9 conceptual translation of range 119253-119880) <220> <221> VARIANT <222> (1)...(210) <223> Xaa = Any Amino Acid <400>2604 Ser Val Lys Tyr Leu Asn Glu Ser Phe Pro Glu Asp Phe Ile Leu Met 10 Gly Phe Val Lys Tyr Pro Trp Leu Asp Phe Leu Leu Phe Cys Val Leu 25 Leu Thr Phe Tyr Met Phe Thr Leu Leu Gly Asn Ser Ala Ile Ile Leu 40 45 Val Ser Gln Leu Asp Ser Gln Leu His Ser Pro Met Tyr Phe Leu Leu 55 60 Thr Ser Leu Ser Val Leu Tyr Leu Cys Phe Thr Thr Thr Val Pro 75 70 Gln Met Leu Phe Asn Leu Gly Gly Thr Asn Lys Asn Ile Thr Xaa Ile Gly Cys Met Ala Gln Ala Tyr Val Phe His Trp Leu Ala Cys Thr Glu

105 Cys Val Leu Leu Gly Ile Val Ala Leu Asp Cys Tyr Val Ala Val Cys 120

110

125

```
Lys Pro Pro Arg Tyr Thr Ile Ile Ile Asp His Lys Val Tyr Leu His
                         135
 Leu Ser Ser Thr Ala Trp Leu Ile Gly Leu Ala Asn Ser Leu Leu Gln
                     150
                                         155
 Ser Thr Ile Thr Ile Gln Leu Pro Leu Xaa Arg Cys Ile Ala Gln Ile
                165
                                     170
 Phe Leu Xaa Leu Glu Ser Val Thr Xaa Gln Ser Leu Thr Val Thr Tyr
            180
                                185
                                                     190
 Leu Xaa Asp Leu Leu Gln His Ser Ile Xaa Gly Gln Leu His Ala Gly
 Glu Leu
     210
 <210> 2605
 <211> 216
 <212> PRT
 <213> Unknown (2921643-dir-0-8 conceptual translation of range 2-649)
 <400>2605
Leu Val Asp Val Ser Tyr Ala Thr Ser Val Val Pro Gln Leu Leu Ala
 1
                                     10
His Phe Leu Ala Glu His Lys Ala Ile Pro Phe Gln Ser Cys Ala Ala
                                 25
                                                     30
Gln Leu Phe Phe Ser Leu Ala Leu Gly Gly Ile Glu Phe Val Leu Leu
                                                 45
Ala Val Met Gly Tyr Asp Arg Tyr Val Ala Val Cys Asp Ala Leu Arg
                         55
Tyr Ser Ala Ile Met His Gly Gly Leu Cys Ala Arg Leu Ala Ile Thr
                    70
Ser Trp Val Ser Gly Phe Ile Ser Ser Pro Val Gln Thr Ala Ile Thr
                85
                                     90
Phe Gln Leu Pro Met Cys Arg Asn Lys Phe Ile Asp His Ile Ser Cys
                                105
                                                     110
Glu Leu Leu Ala Val Val Arg Leu Ala Arg Val Asp Thr Ser Ser Asn
                            120
                                                 125
Glu Val Thr Ile Met Val Ser Ser Ile Val Leu Leu Met Thr Pro Phe
                        135
                                             140
Cys Leu Val Leu Leu Ser Tyr Ile Gln Ile Ile Ser Thr Ile Leu Lys
                    150
Ile Gln Ser Arg Glu Gly Arg Lys Lys Ala Phe His Thr Cys Ala Ser
                165
                                    170
His Leu Thr Val Val Ala Leu Cys Tyr Gly Val Ala Ile Phe Thr Tyr
            180
                                185
Ile Gln Pro His Ser Ser Pro Ser Val Leu Gln Glu Lys Leu Phe Ser
                            200
Val Phe Tyr Ala Ile Leu Thr Pro
    210
<210> 2606
<211> 216
<212> PRT
<213> Unknown (2921711-dir-0-8 conceptual translation of range 2-649)
<400>2606
Leu Val Asp Val Ser Cys Ala Thr Ser Val Val Pro Gln Leu Leu Ala
                                    10
His Phe Leu Ala Glu His Lys Ala Ile Pro Phe Gln Ser Cys Ala Ala
                                25
Gln Leu Phe Phe Ser Leu Ala Leu Gly Gly Ile Glu Phe Val Leu Leu
                           40
Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Val Cys Asp Ala Leu Arg
```

```
60
                       55
Tyr Ser Ala Ile Met His Gly Gly Leu Cys Ala Arg Leu Ala Ile Thr
                                       75
                   70
Ser Trp Val Ser Gly Phe Ile Ser Ser Pro Val Gln Thr Ala Ile Thr
               85
                                    90
Phe Gln Leu Pro Met Cys Arg Asn Lys Phe Ile Asp His Ile Ser Cys
                               105
Glu Leu Leu Ala Val Val Arg Leu Ala Cys Val Asp Thr Ser Ser Asn
                                               125
                           120
Glu Val Thr Ile Met Val Ser Ser Ile Val Leu Leu Met Thr Pro Phe
                                           140
                       135
Cys Leu Val Leu Leu Ser Tyr Ile Gln Ile Ile Ser Thr Ile Leu Lys
                                       155
                  150
Ile Gln Ser Arg Glu Gly Arg Lys Lys Ala Phe His Thr Cys Ala Ser
                                   170
               165
His Leu Thr Val Val Ala Leu Cys Tyr Gly Val Ala Ile Phe Thr Tyr
                              185
           180
Ile Gln Pro His Ser Ser Pro Ser Val Leu Gln Glu Lys Leu Phe Ser
                          200
Val Phe Tyr Ala Ile Leu Thr Pro
<210> 2607
<211> 317
<212> PRT
<213> Unknown (1336042-dir-0-11 conceptual translation of range 1-951)
<400>2607
Met Gly Thr Asp Asn Gln Thr Trp Val Ser Glu Phe Ile Leu Leu Gly
                5
Leu Ser Ser Asp Trp Asp Thr Arg Val Ser Leu Phe Val Leu Phe Leu
           20
                                25
Val Met Tyr Val Val Thr Val Leu Gly Asn Cys Leu Ile Val Leu Leu
                                                45
                           40
Ile Arg Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Thr
                                           60
                       55
Asn Leu Ser Leu Val Asp Val Ser Tyr Ala Thr Ser Val Val Pro Gln
                                        75
                   70
Leu Leu Ala His Phe Leu Ala Glu His Lys Ala Ile Pro Phe Gln Ser
                                    90
Cys Ala Ala Gln Leu Phe Phe Ser Leu Ala Leu Gly Gly Ile Glu Phe
                                105
Val Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Val Cys Asp
                           120
Ala Leu Arg Tyr Ser Ala Ile Met His Gly Gly Leu Cys Ala Arg Leu
                       135
                                           140
Ala Ile Thr Ser Trp Val Ser Gly Phe Ile Ser Ser Pro Val Gln Thr
                                       155
                   150
Ala Ile Thr Phe Gln Leu Pro Met Cys Arg Asn Lys Phe Ile Asp His
                                   170
               165
Ile Ser Cys Glu Leu Leu Ala Val Val Arg Leu Ala Cys Val Asp Thr
                                185
           180
Ser Ser Asn Glu Val Thr Ile Met Val Ser Ser Ile Val Leu Leu Met
                                                205
                           200
Thr Pro Leu Cys Leu Val Leu Leu Ser Tyr Ile Gln Ile Ile Ser Thr
                                            220
                        215
Ile Leu Lys Ile Gln Ser Arg Glu Gly Arg Lys Lys Ala Phe His Thr
                    230
                                        235
Cys Ala Ser His Leu Thr Val Val Ala Leu Cys Tyr Gly Val Ala Ile
                                    250
Phe Thr Tyr Ile Gln Pro His Ser Ser Pro Ser Val Leu Gln Glu Lys
```

```
260
                                 265
 Leu Phe Ser Val Phe Tyr Ala Ile Leu Thr Pro Met Leu Asn Pro Met
                            280
                                                 285
 Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Gly Ala Trp Gln Lys Leu
                        295
                                            300
 Leu Trp Lys Phe Ser Gly Leu Thr Ser Lys Leu Ala Thr
                     310
 <210> 2608
 <211> 216
 <212> PRT
 <213> Unknown (2921713-dir-0-8 conceptual translation of range 2-649)
 <400>2608
 Leu Val Asp Val Ser Tyr Ala Thr Ser Val Val Pro Gln Leu Leu Ala
                                    10
His Phe Leu Ala Glu His Lys Ala Thr Pro Phe Gln Ser Cys Ala Ala
                                25
Gln Leu Phe Phe Ser Leu Ala Leu Gly Gly Ile Glu Phe Val Leu Leu
Ala Val Met Thr Tyr Asp Arg Tyr Val Ala Val Cys Asp Ala Leu Arg
                       55
Tyr Ser Ala Ile Met His Gly Gly Leu Cys Ala Arg Leu Ala Ile Thr
                    70
                                        75
Ser Trp Val Ser Gly Phe Ile Ser Ser Pro Val Gln Thr Ala Ile Thr
                85
                                    90
Phe Gln Leu Pro Met Cys Arg Asn Lys Phe Ile Asp His Ile Ser Cys
                                105
Glu Leu Leu Ala Val Val Arg Leu Ala Cys Val Asp Thr Ser Ser Asn
                            120
                                                125
Glu Val Thr Ile Met Val Ser Ser Val Val Leu Leu Met Thr Pro Phe
                        135
Cys Leu Val Leu Leu Ser Tyr Ile Gln Ile Asn Ser Thr Ile Leu Lys
                   150
                                        155
Ile Gln Ser Arg Glu Gly Arg Lys Lys Ala Phe His Thr Cys Ala Ser
                165
                                    170
His Leu Thr Val Val Ala Leu Cys Tyr Gly Val Ala Ile Phe Thr Tyr
            180
                               185
Ile Gln Pro His Ser Ser Pro Ser Val Leu Gln Glu Lys Leu Phe Ser
        195
                           200
Val Phe Tyr Ala Ile Leu Thr Pro
    210
<210> 2609
<211> 301
<213> Unknown (p161-dir-0-11 conceptual translation of range 2-903)
<400>2609
Trp Val Ser Glu Phe Ile Leu Leu Gly Leu Ser Ser Asp Trp Asp Thr
                5
                                    10
Gln Val Ser Leu Phe Val Leu Phe Leu Val Met Tyr Val Val Thr Val
                                25
Leu Gly Asn Cys Leu Ile Val Leu Leu Ile Arg Leu Asp Ser Arg Leu
                            40
His Thr Pro Met Tyr Phe Phe Leu Thr Asn Leu Ser Leu Val Asp Val
                        55
Ser Tyr Ala Thr Ser Val Val Pro Gln Leu Leu Ala His Phe Leu Ala
                    70
                                       75
Glu His Lys Ala Ile Ser Phe Gln Ser Cys Ala Ala Gln Leu Phe Phe
               85
                                    90
```

```
Ser Leu Ala Leu Gly Gly Ile Glu Phe Val Leu Leu Ala Val Met Ala
                               105
           100
Tyr Asp Arg Tyr Val Ala Val Cys Asp Ala Leu Arg Tyr Ser Ala Ile
                            120
                                                125
       115
Met His Gly Gly Leu Cys Ala Arg Leu Ala Ile Thr Ser Trp Val Ser
                       135
                                            140
Gly Phe Ile Asn Ser Leu Val Gln Thr Ala Ile Thr Phe Gln Leu Pro
                   150
                                       155
Met Cys Thr Asn Lys Phe Ile Asp His Ile Ser Cys Glu Leu Leu Ala
                                  170
               165
Val Val Arg Leu Ala Cys Val Asp Thr Ser Ser Asn Glu Val Thr Ile
                               185
           180
Met Val Ser Ser Ile Val Leu Leu Met Thr Pro Phe Cys Leu Val Leu
                                            205
                           200
Leu Ser Tyr Ile Gln Ile Thr Ser Thr Ile Leu Lys Ile Gln Ser Arg
                                           220
                       215
Glu Gly Arg Arg Lys Ala Phe His Thr Cys Ala Ser His Leu Thr Val
                                       235
                   230
225
Val Ala Leu Cys Tyr Gly Val Ala Ile Phe Thr Tyr Ile Gln Pro His
                                    250
               245
Ser Ser Pro Ser Val Leu Gln Glu Lys Leu Phe Ser Val Phe Tyr Ala
            260
                                265
Ile Leu Thr Pro Met Leu Asn Pro Met Ile Tyr Ser Leu Arg Asn Lys
                           280
Glu Val Lys Gly Ala Trp Gln Lys Leu Leu Trp Lys Phe
                       295
<210> 2610
<211> 334
<212> PRT
<213> Unknown (3766130-dir-170-13 conceptual translation of range 17111-
18112)
<220>
<221> VARIANT
<222> (1)...(334)
<223> Xaa = Any Amino Acid
<400>2610
Phe Cys Phe Phe Leu Thr Leu Ser Thr Asp Xaa Tyr Ser Ser His Phe
                                   10
           5
Xaa Met Glu Ile Asp Asn Gln Thr Trp Val Arg Glu Phe Ile Leu Leu
                               25
Gly Leu Ser Ser Asp Trp Cys Thr Gln Ile Ser Leu Phe Ser Leu Phe
       35
                            40
Leu Val Thr Tyr Leu Met Thr Val Leu Gly Asn Cys Leu Ile Val Leu
                                           60
                       55
Leu Ile Arg Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu
                   70
                                       75
Thr Asn Leu Ser Leu Val Asp Val Ser Tyr Ala Thr Ser Val Val Pro
                                    90
Gln Leu Leu Ala His Phe Leu Ala Glu His Lys Ala Ile Pro Phe Gln
           100
                               105
Ser Cys Ala Ala Gln Leu Phe Phe Ser Leu Ala Leu Gly Gly Ile Glu
                           120
                                               125
Phe Val Leu Leu Ala Val Met Ala Tyr Asp Arg His Val Ala Val Ser
                       135
                                           140
Asp Arg Leu Arg Tyr Ser Ala Ile Met His Gly Gly Leu Cys Ala Arg
                   150
                                       155
Leu Ala Ile Thr Ser Trp Val Ser Gly Ser Ile Asn Ser Leu Val Gln
                                   170
               165
```

```
Thr Ala Ile Thr Phe Gln Leu Pro Met Cys Thr Asn Lys Phe Ile Asp
           180
                               185
His Ile Ser Cys Glu Leu Leu Ala Val Val Arg Leu Ala Cys Val Asp
                            200
        195
Thr Ser Ser Asn Glu Ala Ala Ile Met Val Ser Ser Ile Val Leu Leu
                                            220
                       215
Met Thr Pro Phe Cys Leu Val Leu Leu Ser Tyr Ile Arg Ile Ile Ser
                                        235
                   230
Thr Ile Leu Lys Ile Gln Ser Arg Glu Gly Arg Lys Lys Ala Phe His
                                    250
               245
Thr Cys Ala Ser His Leu Thr Val Val Ala Leu Cys Tyr Gly Thr Thr
                                                    270
                                265
Ile Phe Thr Tyr Ile Gln Pro His Ser Gly Pro Ser Val Leu Gln Glu
                            280
                                                285
Lys Leu Ile Ser Val Phe Tyr Ala Ile Val Met Pro Leu Leu Asn Pro
                                            300
                        295
Val Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Gly Ala Trp His Lys
                   310
                                        315
Leu Leu Glu Lys Phe Ser Gly Leu Thr Ser Lys Leu Gly Thr
<210> 2611
<211> 298
<212> PRT
<213> Unknown (p172-dir-0-10 conceptual translation of range 2-895)
Thr Ile Ile Leu Leu Gly Leu Ser Ser Asp Trp Asp Ala Gln Val Ser
                                    10
Leu Phe Val Leu Phe Leu Val Met Cys Met Val Thr Met Leu Gly Asn
                                25
            20
Cys Leu Ile Val Leu Leu Ile Arg Leu Asp Asn Arg Leu His Thr Pro
                            40
Met Tyr Phe Phe Leu Thr Asn Leu Ser Leu Val Asp Val Ser Tyr Ala
                        55
                                            60
Thr Ser Ile Val Pro Gln Leu Leu Ala His Phe Leu Ala Glu His Lys
                    70
                                        75
Ser Ile Pro Phe Gln Ser Cys Ala Ala Gln Leu Phe Phe Ser Leu Ala
                85
                                    90
Leu Gly Gly Ile Glu Phe Val Leu Leu Ala Val Met Ala Tyr Asp Arg
                                105
            100
Tyr Val Ala Val Cys Asp Pro Leu Arg Tyr Ser Ala Ile Met His Gly
                            120
                                                125
Ala Pro Cys Ala Arg Leu Ala Ile Thr Ser Trp Val Ser Gly Phe Ile
                        135
Asn Ser Leu Val Gln Thr Ala Ile Thr Phe His Leu Pro Met Cys Thr
                                        155
                    150
Asn Lys Phe Ile Asp His Ile Ser Cys Glu Leu Leu Ala Val Ile Arg
                165
                                    170
Leu Ala Cys Val Asp Thr Ser Ser Asn Glu Ala Ala Ile Met Val Ser
            180
                                185
Ser Ile Val Phe Leu Met Thr Pro Phe Cys Leu Val Leu Leu Ser Tyr
                            200
                                                205
        195
Ile Trp Ile Ile Ser Thr Ile Val Lys Ile Gln Ser Thr Glu Gly Arg
                        215
                                            220
Lys Lys Ala Phe His Thr Cys Ala Ser His Leu Thr Val Val Ala Leu
                                        235
                   230
Cys Tyr Gly Leu Ala Ile Phe Thr Tyr Ile Gln Pro His Ser Ser Leu
                                    250
               245
Ser Val Leu Gln Glu Lys Leu Phe Ser Leu Phe Tyr Ala Ile Leu Thr
                                265
```

```
Pro Met Leu Asn Pro Met Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys
                           280
 Gly Ala Trp Gln Lys Leu Leu Trp Lys Phe
 <210> 2612
 <211> 298
 <212> PRT
 <213> Unknown (p171-dir-0-10 conceptual translation of range 3-896)
<220>
 <221> VARIANT
 <222> (1)...(298)
<223> Xaa = Any Amino Acid
<400>2612
Ser Asp Phe Ile Leu Leu Gly Leu Ser Ser Asp Trp Asp Ala Gln Val
                                     10
Ser Leu Phe Val Leu Phe Leu Val Met Tyr Met Val Thr Met Leu Gly
                                25
Asn Cys Leu Ile Val Leu Leu Ile Arg Leu Asp Asn Arg Leu His Thr
                            40
Pro Met Tyr Phe Phe Leu Thr Asn Leu Ser Leu Val Asp Val Ser Tyr
                        55
                                             60
Ala Thr Ser Ile Val Pro Gln Leu Leu Ala His Phe Leu Ala Glu His
                    70
                                         75
Lys Ser Ile Pro Phe Gln Ser Cys Ala Ala Gln Leu Phe Phe Ser Leu
Ala Leu Gly Gly Ile Glu Phe Val Leu Leu Ala Val Met Ala Tyr Asp
            100
                                105
                                                     110
Arg Tyr Val Ala Val Cys Asp Pro Leu Arg Tyr Ser Ala Ile Met His
                            120
                                                125
Gly Ala Leu Cys Ala Arg Leu Ala Ile Thr Ser Trp Val Ser Gly Phe
                        135
                                            140
Ile Asn Ser Leu Val Gln Thr Ala Ile Thr Phe His Leu Pro Met Cys
                    150
                                        155
Thr Asn Lys Phe Ile Asp His Ile Ser Cys Glu Leu Leu Ala Val Ile
               165
                                    170
Arg Leu Ala Cys Val Asp Thr Ser Ser Asn Glu Ala Ala Ile Met Val
            180
                                185
                                                     190
Ser Ser Ile Val Phe Leu Met Thr Pro Phe Cys Leu Val Leu Leu Ser
                            200
Tyr Ile Xaa Ile Ile Ser Thr Ile Val Lys Ile Gln Ser Thr Glu Gly
                        215
                                             220
Arg Lys Lys Ala Phe His Thr Tyr Ala Ser His Leu Thr Val Val Ala
                    230
                                        235
Leu Cys Tyr Gly Leu Ala Ile Phe Thr Tyr Ile Gln Pro His Ser Ser
                                    250
                245
Leu Ser Val Leu Gln Glu Lys Leu Phe Ser Leu Phe Tyr Ala Ile Leu
                                265
Thr Pro Met Leu Asn Pro Met Ile Tyr Ser Leu Arg Asn Lys Glu Val
                            280
Lys Gly Ala Trp Gln Lys Leu Leu Trp Lys
   290
                        295
<210> 2613
<211> 299
<212> PRT
<213> Unknown (p173-dir-0-11 conceptual translation of range 4-900)
<400>2613
```

```
Val Thr Ile Ile Leu Leu Gly Leu Ser Ser Asp Trp Asp Ala Gln Val
                                    10
Ser Leu Phe Val Leu Phe Leu Val Met Tyr Met Val Thr Met Leu Gly
                                25
Asn Cys Leu Ile Val Leu Leu Ile Arg Leu Asp Asn Arg Leu His Thr
                            40
Pro Met Tyr Phe Phe Leu Thr Asn Leu Ser Leu Val Asp Val Ser Tyr
                        55
Ala Ile Ser Ile Val Pro Gln Leu Leu Ala His Phe Leu Ala Glu His
Lys Ala Ile Ser Leu Gln Ser Cys Ala Ala Gln Leu Phe Phe Ser Leu
                                    90
Ala Leu Gly Gly Ile Glu Phe Val Leu Leu Ala Val Met Ala Tyr Asp
            100
                               105
Arg Tyr Val Ala Val Cys Asp Pro Leu Arg Tyr Ser Ala Ile Met His
                      . 120
                                                125
Gly Ala Leu Cys Ala Arg Leu Ala Ile Thr Ser Trp Val Ser Gly Phe
                        135
                                            140
Ile Asn Ser Leu Val Gln Thr Ala Ile Thr Phe His Leu Pro Met Cys
                    150
                                        155
Thr Asn Lys Phe Ile Asp His Ile Ser Cys Glu Leu Leu Ala Val Ile
                                   170
                165
Arg Leu Ala Cys Val Asp Thr Ser Ser Asn Glu Ala Ala Ile Met Val
            180
                                185
Ser Ser Ile Val Phe Leu Met Thr Pro Phe Cys Leu Val Leu Leu Ser
                            200
Tyr Ile Trp Ile Ile Ser Thr Ile Val Lys Ile Gln Ser Thr Glu Gly
                        215
Arg Lys Lys Ala Phe His Thr Cys Ala Ser His Leu Thr Val Val Ala
                    230
                                        235
Leu Cys Tyr Gly Leu Ala Ile Phe Thr Tyr Ile Gln Pro His Ser Ser
                                    250
Leu Ser Val Leu Gln Glu Lys Leu Phe Ser Leu Phe Tyr Ala Ile Leu
                                265
Thr Pro Met Leu Asn Pro Met Ile Tyr Ser Leu Arg Asn Lys Glu Val
                           280
Lys Gly Ala Trp Gln Lys Leu Leu Trp Lys Phe
<210> 2614
<211> 300
<212> PRT
<213> Unknown (p142-dir-0-11 conceptual translation of range 2-900)
<400>2614
Val Ser Glu Phe Ile Leu Leu Gly Leu Ser Ser Asp Trp Asp Thr Gln
Val Ser Leu Phe Val Leu Phe Leu Val Met Tyr Val Val Thr Val Leu
Gly Asn Cys Leu Ile Val Leu Leu Ile Arg Leu Asp Ser Arg Leu His
                            40
Thr Pro Met Tyr Phe Phe Leu Thr Asn Leu Ser Leu Val Asp Val Ser
                        55
Tyr Ala Thr Ser Ile Val Pro Gln Leu Leu Ala His Phe Leu Ala Glu
                   70
His Lys Ala Ile Ser Phe Gln Ser Cys Ala Ala Gln Leu Phe Phe Ser
                                    90
                85
Leu Ala Leu Gly Gly Ile Glu Phe Val Leu Leu Ala Val Met Ala Tyr
                               105
Asp Arg Tyr Val Ala Val Cys Asp Pro Leu Arg Tyr Ser Ala Ile Met
                           120
```

```
His Ala Ala Leu Cys Ala Arg Leu Ala Val Thr Ser Trp Val Ser Gly
               135
Ser Ile Asn Ser Leu Val His Thr Thr Ile Thr Phe Gln Leu Pro Met
                  150
                                      155
Cys Ala Asn Lys Phe Ile Asp His Ile Ser Cys Glu Ile Leu Ala Val
                                  170
              165
Val Arg Leu Ala Cys Val Asp Thr Ser Ser Asn Glu Val Thr Ile Met
                    185
          180
Val Phe Ser Ile Val Leu Leu Met Thr Pro Phe Cys Leu Val Leu Leu
                           200
Ser Tyr Ile Gln Ile Ile Ser Thr Ile Leu Lys Ile Gln Ser Arg Glu
                                           220
                       215
Gly Arg Arg Lys Ala Phe Gln Thr Cys Gly Ser His Leu Thr Met Val
                   230
                                       235
Ala Leu Cys Tyr Gly Val Ala Ile Phe Thr Tyr Ile Gln Pro His Ser
                                   250
               245
Ser Pro Ser Val Leu Gln Glu Lys Leu Ile Ser Leu Phe Tyr Ala Ile
                                              270
           260
                               265
Leu Thr Pro Met Leu Asn Pro Met Ile Tyr Ser Leu Arg Ser Lys Glu
                          280
Val Lys Gly Ala Trp Lys Lys Leu Tyr Trp Lys Phe
<210> 2615
<211> 300
<213> Unknown (p162-dir-0-10 conceptual translation of range 1-899)
<400>2615
Val Ser Glu Phe Ile Leu Leu Gly Leu Ser Ser Asp Trp Asp Thr Gln
                                   10
Val Ser Leu Phe Val Leu Phe Leu Val Met Tyr Val Val Thr Val Leu
                               25
Gly Asn Cys Leu Ile Val Leu Leu Ile Arg Leu Asp Ser Arg Leu His
                          40
       35
Thr Pro Met Tyr Phe Phe Leu Thr Asn Leu Ser Leu Val Asp Val Ser
                      55
Tyr Ala Thr Ser Ile Val Pro Gln Leu Leu Ala His Phe Leu Ala Glu
                   70
                                      75
His Lys Ala Ile Ser Phe Gln Ser Cys Ala Ala Gln Leu Phe Phe Ser
                                  90
               85
Leu Ala Leu Gly Gly Ile Glu Phe Val Leu Leu Ala Val Met Ala Tyr
                               105
        100
Asp Arg Tyr Val Ala Val Cys Asp Pro Leu Arg Tyr Ser Ala Ile Met
   . 115
                                               125
                           120
His Ala Ala Leu Cys Ala Arg Leu Ala Val Thr Ser Trp Val Ser Gly
                       135
                                           140
Ser Ile Asn Ser Leu Ala His Thr Thr Ile Thr Phe Gln Leu Pro Met
                                       155
                   150
Cys Ala Asn Lys Phe Ile Asp His Ile Ser Cys Glu Ile Leu Ala Val
                                   170
Val Arg Leu Ala Cys Val Asp Thr Ser Ser Asn Glu Val Thr Ile Met
                               185
Val Ser Ser Ile Val Leu Leu Met Thr Pro Phe Cys Leu Val Leu Leu
                           200
                                               205
Ser Tyr Ile Gln Ile Ile Ser Thr Ile Leu Lys Ile Gln Ser Arg Glu
                       215
                                          220
Gly Arg Arg Lys Ala Phe Gln Thr Cys Gly Ser His Leu Thr Val Val
                                      235
     230
Ala Leu Cys Tyr Gly Val Ala Ile Phe Thr Tyr Ile Gln Pro His Ser
              245
                                   250
```

Ser Pro Ser Val Leu Gln Glu Lys Leu Ile Ser Leu Phe Tyr Ala Thr 260 265 Leu Thr Pro Met Leu Asn Pro Met Ile Tyr Ser Leu Arg Asn Lys Glu 280 Val Lys Gly Ala Trp Lys Lys Leu Tyr Trp Lys Phe 295 <210> 2616 <211> 300 <212> PRT <213> Unknown (p160-dir-0-11 conceptual translation of range 3-901) <400>2616 Val Ser Glu Phe Ile Leu Leu Gly Leu Ser Ser Asp Trp Asp Thr Gln 1 Val Ser Leu Phe Val Leu Phe Leu Val Met Tyr Val Val Thr Val Leu 20 Gly Asn Cys Leu Ile Val Leu Leu Ile Arg Leu Asp Ser Arg Leu His 35 Thr Pro Met Tyr Phe Phe Leu Thr Asn Leu Ser Leu Val Asp Val Ser 55 Tyr Val Thr Ser Ile Val Pro Gln Leu Leu Ala His Phe Leu Ala Glu 70 75 His Lys Ala Ile Ser Phe Gln Ser Cys Ala Ala Gln Leu Phe Phe Ser 90 Leu Ala Leu Gly Gly Ile Glu Phe Val Leu Leu Ala Val Met Ala Tyr 100 105 Asp Arg Tyr Val Ala Val Cys Asp Pro Leu Arg Tyr Ser Ala Ile Met 115 120 125 His Ala Ala Leu Cys Ala Arg Leu Ala Val Thr Ser Trp Val Ser Gly 135 Ser Ile Asn Ser Leu Val His Thr Thr Thr Thr Phe Gln Leu Pro Met 150 155 Cys Ala Asn Lys Phe Ile Asp His Ile Ser Cys Glu Ile Leu Ala Val 165 170 Val Arg Leu Ala Cys Val Asp Thr Ser Ser Asn Glu Val Thr Ile Met 180 185 Val Ser Ser Ile Val Leu Leu Met Thr Pro Phe Cys Leu Val Leu Leu 195 200 205 Ser Tyr Ile Gln Ile Ile Ser Thr Ile Leu Lys Ile Gln Ser Arg Lys 215 220 Gly Arg Arg Lys Ala Phe Gln Thr Cys Gly Ser His Leu Thr Val Val 230 235 Ala Leu Cys Tyr Gly Val Ala Ile Phe Thr Tyr Ile Gln Pro His Ser 245 250 Asn Pro Ser Val Leu Gln Glu Lys Leu Ile Ser Leu Phe Tyr Ala Ile 265 270 Leu Thr Pro Met Leu Asn Pro Met Ile Tyr Ser Leu Arg Asn Lys Glu 280 Val Lys Gly Ala Trp Lys Lys Leu Tyr Trp Lys Phe 295 <210> 2617 <211> 298 <212> PRT <213> Unknown (p165-dir-0-10 conceptual translation of range 1-893) Val Ser Glu Phe Ile Ile Leu Gly Leu Ser Ser Asp Trp Asp Thr Gln 10 Val Ser Leu Phe Val Leu Phe Leu Val Met Tyr Met Val Thr Val Leu

```
25
Gly Asn Cys Leu Ile Val Leu Leu Ile Arg Leu Asp Ser Arg Leu His
                           40
Thr Pro Met Tyr Phe Phe Leu Thr Asn Leu Ser Leu Val Asp Val Ser
                                           60
Tyr Ala Thr Ser Ile Val Pro Gln Leu Leu Ala His Phe Leu Ala Glu
                   70
                                       75
His Lys Ala Ile Pro Phe Gln Ser Cys Ala Ala Gln Leu Phe Phe Ser
                                   90
               85
Leu Ala Leu Gly Gly Ile Glu Phe Val Leu Arg Ala Val Met Ala Tyr
                                                  110
                               105
           100
Asp Arg Tyr Val Ala Val Cys Asp Pro Leu Arg Tyr Ser Ala Ile Met
                          120
                                               125
      115
His Ala Ala Leu Cys Ala Arg Leu Ala Val Thr Ser Trp Val Ser Gly
                                          140
                      135
Ser Ile Asn Ser Leu Val His Thr Thr Ile Thr Phe Gln Leu Pro Met
                                       155
                  150
Cys Thr Asn Lys Phe Val Asp His Ile Ser Cys Glu Ile Leu Ala Val
              165
                                   170
Ile Arg Leu Ala Cys Val Asn Thr Ser Ser Asn Glu Val Thr Ile Met
                               185
           180
Val Ser Ser Met Val Leu Leu Met Thr Pro Phe Cys Leu Val Leu Leu
                                               205
                           200
Ser Asp Ile Gln Ile Ile Ser Thr Ile Leu Lys Ile Gln Ser Arg Glu
                                           220
                       215
   210
Gly Arg Arg Lys Ala Phe Gln Thr Cys Ala Ser His Leu Thr Val Val
                                       235
                   230
Ala Leu Cys Tyr Gly Met Ala Ile Phe Thr Tyr Ile Gln Pro His Ser
                                                       255
                                  250
               245
Ser Pro Ser Val Leu Gln Glu Lys Leu Ile Ser Leu Phe Tyr Ala Ile
                                                   270
                               265
           260
Glu Thr Pro Met Leu Asn Pro Met Ile Tyr Ser Leu Arg Asn Lys Glu
                           280
                                              285
Val Lys Gly Ala Trp Lys Lys Leu Leu Trp
   290
                      295
<210> 2618
<211> 299
<212> PRT
<213> Unknown (p157-dir-0-10 conceptual translation of range 3-898)
<220>
<221> VARIANT
<222> (1)...(299)
<223> Xaa = Any Amino Acid
<400>2618
Val Ser Glu Phe Ile Ile Leu Gly Leu Ser Ser Asp Trp Asp Thr Gln
                                   10
1 5
Val Ser Leu Phe Val Leu Phe Leu Val Met Tyr Val Val Thr Val Leu
                               25
Gly Asn Cys Leu Ile Val Leu Leu Ile Arg Leu Asp Ser Arg Leu His
                           40
                                               45
Thr Pro Met Tyr Phe Phe Leu Thr Asn Leu Ser Leu Val Asp Val Ser
                                           60
                       55
Tyr Ala Thr Ser Val Val Pro Gln Leu Leu Ala His Phe Leu Ala Glu
                                       75
                   70
His Lys Ala Ile Pro Phe Gln Ser Cys Ala Ala Gln Leu Phe Phe Ser
                                   90
Leu Ala Leu Gly Gly Ile Glu Phe Val Leu Leu Ala Val Met Ala Tyr
           100
                               105
```

```
Asp Arg Tyr Val Ala Val Cys Asp Pro Leu Arg Tyr Ser Ala Ile Met
                            120
His Ala Gly Leu Cys Ala Arg Leu Ala Val Thr Ser Trp Val Ser Gly
                        135
                                             140
Ser Ile Asn Ser Leu Val His Thr Ala Ile Thr Phe Gln Leu Pro Arg
                    150
                                        155
Cys Arg Asn Lys Phe Ile Glu His Ile Ser Cys Glu Ile Leu Ala Val
                165
                                    170
Ile Arg Leu Ala Cys Val Asp Thr Ser Ser Asn Glu Val Thr Ile Met
                                185
            180
Val Ser Ser Ile Val Leu Leu Met Thr Pro Phe Cys Leu Val Leu Leu
                            200
        195
Ser Tyr Ile Gln Ile Ile Ser Thr Ile Leu Lys Ile Gln Ser Arg Glu
                        215
                                            220
Gly Arg Arg Lys Ala Phe His Thr Cys Ala Ser His Leu Thr Val Val
                    230
                                        235
Ala Leu Xaa Tyr Gly Val Ala Ile Phe Thr Xaa Ile Gln Pro His Ser
                245
                                    250
Ser Pro Ser Val Ile Gln Glu Lys Leu Phe Ser Leu Phe Tyr Ala Ile
            260
                                265
                                                    270
Val Thr Pro Met Leu Asn Pro Met Ile Tyr Ser Ile Arg Asn Lys Glu
       275
                            280
Val Lys Gly Ala Trp Gln Lys Ile Leu Trp Lys
<210> 2619
<211> 299
<212> PRT
<213> Unknown (p174-dir-0-11 conceptual translation of range 4-900)
Val Thr Ile Ile Leu Leu Gly Leu Ser Ser Asp Trp Asp Ala Gln Val
                                    10
Ser Leu Phe Val Leu Phe Leu Val Met Tyr Met Val Thr Met Leu Gly
            20
                                25
Asn Cys Leu Ile Val Leu Leu Ile Arg Leu Asp Ser Arg Leu His Thr
                            40
Pro Met Tyr Phe Phe Leu Thr Asn Leu Ser Leu Val Asp Val Ser Tyr
                        55
Ala Thr Ser Ile Val Pro Gln Leu Leu Ala His Phe Leu Ala Glu His
                    70
                                        75
Lys Ala Ile Ser Leu Gln Ser Cys Ala Ala Gln Leu Phe Phe Ser Leu
                85
                                    90
Ala Leu Gly Gly Ile Glu Phe Val Leu Leu Ala Val Met Ala Tyr Asp
                                105
                                                    110
            100
Arg Tyr Val Ala Val Cys Asp Pro Leu Arg Tyr Ser Val Ile Met His
                            120
                                                125
Gly Ala Leu Cys Ala Lys Leu Ala Ile Thr Ser Trp Val Ser Gly Ser
                        135
                                            140
Ile Asn Ser Arg Met His Thr Thr Ile Thr Phe Gln Leu Pro Met Cys
                    150
                                        155
Thr Asn Lys Phe Ile Asp His Ile Phe Cys Glu Ile Leu Ala Leu Ile
                                    170
                165
Arg Leu Ala Cys Val Asp Thr Ser Ser Asn Glu Val Thr Ile Ile Val
            180
                                185
                                                    190
Ser Ser Ile Val Leu Leu Met Thr Pro Leu Cys Leu Val Leu Leu Ser
                            200
                                                205
Tyr Ile Arg Ile Ile Ser Thr Ile Leu Lys Ile Gln Ser Arg Glu Gly
                        215
                                            220
Arg Arg Lys Ala Phe His Thr Cys Ala Ser His Leu Thr Val Val Ala
                                        235
                    230
```

```
Leu Cys Tyr Gly Met Ala Ile Phe Thr Tyr Ile His Pro His Ser Ser
                         250
                245
Pro Ser Val Leu Gln Glu Lys Leu Ile Ser Leu Phe Tyr Ala Ile Leu
                               265
                                                   270
            260
Thr Pro Met Leu Asn Pro Met Ile Tyr Ser Leu Arg Asn Lys Glu Val
                          280
Lys Gly Ala Trp Lys Lys Leu Leu Trp Lys Phe
<210> 2620
<211> 317
<212> PRT
<213> Unknown (1314664-dir-0-11 conceptual translation of range 1-951)
<400>2620
Met Gly Thr Gly Asn Gln Thr Trp Val Arg Glu Phe Val Leu Leu Gly
                                    10
Leu Ser Ser Asp Trp Asp Thr Glu Val Ser Leu Phe Val Leu Phe Leu
                                25
Ile Thr Tyr Met Val Thr Val Leu Gly Asn Phe Leu Ile Ile Leu Leu
       35
                           40
                                                45
Ile Arg Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Thr
                                            60
                        55
Asn Leu Ser Leu Val Asp Val Ser Tyr Ala Thr Ser Ile Ile Pro Gln
                   70
                                        75
Met Leu Ala His Leu Leu Ala Ala His Lys Ala Ile Pro Phe Val Ser
                                    90
Cys Ala Ala Gln Leu Phe Phe Ser Leu Gly Leu Gly Gly Ile Glu Phe
                                                    110
           100
                                105
Val Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Val Cys Asp
                                                125
                           120
Pro Leu Arg Tyr Ser Val Ile Met His Gly Gly Leu Cys Thr Arg Leu
                        135
                                            140
Ala Ile Thr Ser Trp Val Ser Gly Ser Met Asn Ser Leu Met Gln Thr
                   150
                                        155
Val Ile Thr Phe Gln Leu Pro Met Cys Thr Asn Lys Tyr Ile Asp His
                                   170
               165
Ile Ser Cys Glu Leu Leu Ala Val Val Arg Leu Ala Cys Val Asp Thr
                               185
           180
Ser Ser Asn Glu Ile Ala Ile Met Val Ser Ser Ile Val Leu Leu Met
                           200
                                                205
Thr Pro Phe Cys Leu Val Leu Leu Ser Tyr Ile Gln Ile Ile Ser Thr
                                           220
                       215
Ile Leu Lys Ile Gln Ser Thr Glu Gly Arg Lys Lys Ala Phe His Thr
                                       235
                   230
Cys Ala Ser His Leu Thr Val Val Val Leu Cys Tyr Gly Met Ala Ile
                                    250
                245
Phe Thr Tyr Ile Gln Pro Arg Ser Ser Pro Ser Val Leu Gln Glu Lys
                                265
Leu Ile Ser Leu Phe Tyr Ser Val Leu Thr Pro Met Leu Asn Pro Met
                                                285
                           280
Ile Tyr Ser Val Arg Asn Lys Glu Val Lys Gly Ala Trp Gln Lys Leu
   290
                       295
Leu Gly Gln Leu Thr Gly Ile Thr Ser Lys Leu Ala Thr
                   310
<210> 2621
<211> 349
<213> Unknown (3766130-dir-627-13 conceptual translation of range 62771-
63818)
```

```
<220>
 <221> VARIANT
 <222> (1)...(349)
 <223> Xaa = Any Amino Acid
 <400>2621
Leu Leu Ile Leu His Phe His Asp Trp Leu Phe Leu His Leu Xaa Cys
 1
                                    10
Gly Pro Trp Lys Leu Met Gly Gln Glu Asn Lys Asn Gln Thr Trp Val
            20
                                 25
Ser Glu Phe Ile Leu Leu Gly Ile Ser Ser Asp Trp Gly Ile Gln Val
                            40
                                                 45
Ser Leu Phe Ala Leu Ile Leu Ala Met Tyr Leu Val Thr Ile Leu Gly
                         55
                                             60
Asn Thr Leu Ile Leu Leu Leu Ile Arg Leu Asp Asn Arg Leu His Thr
                                        75
Pro Met Tyr Phe Ser Leu Ser Val Leu Ser Phe Val Asp Phe Cys Tyr
                                    90
Thr Lys Ser Ile Val Pro Gln Met Leu Ser His Leu Leu Ser Ala Arg
                                 105
                                                     110
Lys Ser Ile Pro Phe Tyr Ser Cys Val Leu Gln Leu Tyr Val Ser Leu
                            120
Ala Leu Cys Gly Ser Glu Phe Phe Leu Leu Gly Ala Met Ala Tyr Asp
                        135
                                            140
Arg Tyr Val Ala Val Cys His Pro Leu His Tyr Thr Val Ile Met His
                    150
                                        155
Gly Gly Leu Cys Leu Gly Leu Ala Ala Ser Arg Leu Val Ala Gly Phe
                165
                                    170
Ser Asn Ser Leu Met Glu Thr Ile Ile Thr Phe Gln Leu Pro Val Ser
                                185
Arg Phe Ile Asn His Phe Val Cys Glu Thr Leu Ala Val Leu Gln Leu
                            200
Ala Cys Val Asp Val Pro Phe Asn Lys Val Met Val Ala Ile Ser Gly
                        215
                                            220
Phe Leu Val Ile Leu Leu Pro Cys Ser Leu Val Leu Phe Ser Tyr Ala
                    230
                                        235
Cys Ile Val Ala Thr Ile Leu Cys Ile Arg Ser Thr Gln Val Arg Cys
                245
                                    250
Lys Ala Phe Gly Thr Cys Ala Ser His Leu Ile Val Val Cys Met Cys
            260
                                265
Phe Gly Ala Thr Ile Cys Thr Tyr Leu Gly Pro Gln Leu Ala Ser Ser
                            280
Ala Glu Glu Lys Met Ile Ala Leu Phe Tyr Gly Val Val Ser Pro
                        295
                                            300
Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Glu Val Thr Ala
                    310
                                        315
Ala Val Arg Lys Val Leu Glu Arg Cys Arg Xaa Arg Val Lys Thr Leu
                325
                                   330
Arg Thr Ser Cys Tyr Leu Ser Ser Lys Pro Lys Arg Arg
<210> 2622
<211> 214
<212> PRT
<213> Unknown (hg27-dir-0-8 conceptual translation of range 1-642)
<400>2622
Leu Ala Asp Leu Cys Phe Ser Thr Asn Ile Val Pro Gln Ala Leu Val
                                    10
```

His Leu Leu Ser Arg Lys Lys Val Ile Val Phe Thr Leu Cys Ala Ala

```
20
Arg Leu Leu Phe Leu Leu Ile Gly Gly Cys Thr Gln Cys Ala Leu Leu
Gly Val Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu Arg
Tyr Pro Asn Ile Met Thr Trp Lys Val Cys Val Gln Leu Ala Thr Ala
                    70
Pro Trp Thr Ser Gly Ile Leu Val Ser Val Val Asp Thr Thr Phe Thr
                                   90
               85
Leu Arg Leu Pro Tyr Arg Gly Ser Asn Ser Ile Ala His Phe Trp Cys
                               105
           100
Glu Ala Pro Ala Leu Leu Ile Leu Ala Ser Thr Asp Thr His Ala Ser
                           120
Glu Met Ala Ile Phe Leu Thr Gly Val Val Ile Leu Leu Ile Pro Val
                                           140
                       135
Phe Leu Ile Leu Val Ser Tyr Gly Arg Ile Ile Val Thr Val Val Lys
                   150
                                       155
Met Lys Ser Thr Val Gly Ser Leu Lys Ala Phe Ser Thr Cys Gly Ser
                                   170
              165
His Leu Met Val Val Ile Leu Phe Tyr Gly Ser Ala Ile Ile Thr Tyr
                               185
          180
Met Thr Pro Lys Ser Ser Lys Gln Gln Glu Lys Ser Val Ser Val Phe
                           200
Tyr Pro Ile Val Thr Pro
<210> 2623
<211> 217
<212> PRT
<213> Unknown (p51-dir-0-8 conceptual translation of range 1-651)
Ser Leu Ala Asp Leu Cys Phe Ser Thr Asn Ile Val Pro Gln Ala Leu
                                    10
Val His Leu Leu Ser Arg Lys Lys Val Ile Ala Phe Thr Leu Cys Ala
                               25
Ala Arg Leu Leu Phe Phe Leu Ile Phe Gly Cys Thr Gln Cys Ala Leu
Leu Ala Val Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu
                        55
                                            60
Arg Tyr Pro Asp Ile Met Thr Trp Lys Val Cys Val Gln Leu Ala Thr
                                        75
                   70
Gly Ser Trp Thr Ser Gly Ile Leu Val Ser Val Val Asp Thr Thr Phe
                                   90
Thr Leu Arg Leu Pro Tyr Arg Gly Ser Asn Ser Ile Ala His Phe Phe
                               105
Cys Glu Ala Pro Ala Leu Leu Ile Leu Ala Ser Thr Asp Thr His Ala
                           120
                                               125
Ser Glu Met Ala Ile Phe Leu Thr Gly Val Val Ile Leu Leu Ile Pro
                       135
                                           140
Val Phe Leu Ile Leu Val Ser Tyr Gly Arg Ile Ile Val Thr Val Val
                                       155
                   150
Lys Met Lys Ser Thr Val Gly Ser Leu Lys Ala Phe Ser Thr Cys Gly
               165
                                   170
Ser His Leu Met Val Val Ile Leu Phe Tyr Gly Ser Ala Ile Ile Thr
                                                    190
                               185
Tyr Met Thr Pro Lys Ser Ser Lys Gln Glu Lys Ser Val Ser Val
                                               205
                           200
Phe Tyr Ala Ile Val Thr Pro Met Leu
    210
                       215
```

```
<210> 2624
 <211> 158
 <212> PRT
 <213> Unknown (2564517-dir-0-6 conceptual translation of range 1-474)
 <400>2624
 Ile Ser Phe Pro Leu Arg Tyr Thr Ile Ile Met Ser Arg Ser Ile Cys
                                     10
 Ile Thr Met Val Ser Cys Cys Trp Ile Ser Gly Ser Leu Ile Ala Leu
 Val Val Ile Val Phe Thr Leu Gln Leu Pro Leu Cys Gly Ala Asn Val
                             40
 Ile Asn His Phe Phe Cys Glu Ala Thr Thr Leu Val Gly Met Ala Cys
                        55
 Val Asp Thr Phe Val Thr Glu Met Val Ile Phe Ser Ala Gly Ile Phe
                    70
                                        75
Thr Leu Leu Pro Ser Ile Leu Thr Leu Leu Ser Tyr Ile Cys Ile
                85
                                    90
                                                         95
Ile Val Ala Ile Val Gly Ile Arg Ser Ser Ala Gly Arg Tyr Lys Ala
                                 105
                                                     110
Phe Ser Thr Cys Ala Ser His Leu Ile Ile Val Thr Ile Phe Tyr Gly
                            120
                                                125
Thr Ala Ile Phe Gly Tyr Met Lys Pro Val Ser Lys Asn Ser Gly Asn
                        135
                                             140
Gln Asp Lys Met Thr Ser Val Phe Tyr Thr Val Thr Pro Pro
                    150
<210> 2625
<211> 215
<212> PRT
<213> Unknown (p102-dir-0-8 conceptual translation of range 2-646)
Phe Leu Asp Ile Cys Tyr Ile Ser Ala Ser Val Pro Gln Met Ile Val
Asn Cys Leu Val Arg Ile Pro Ile Ile Ser Leu Gly Gln Cys Leu Ala
                                25
Gln Met Cys Ala Gly Leu Tyr Leu Gly Val Val Glu Cys Leu Leu Leu
                            40
Ala Val Met Ala Tyr Asp Arg Cys Ile Ala Ile Gly Asp Pro Leu Arg
                        55
                                            60
Tyr Ser Val Arg Met Gly Pro Gln Leu Cys Ala Gln Leu Ala Gly Ala
                    70
                                        75
Ser Trp Val Ser Ala Phe Leu Leu Thr Val Val Pro Val Leu Thr Met
                                    90
Pro Leu Glu Phe Cys Gly Gln His Ile Ile Asn His Phe Ser Cys Glu
            100
                                105
Leu Leu Ala Val Leu Lys Leu Ala Cys Asn Asp Leu Trp Ile Tyr Glu
                            120
                                                125
Leu Leu Ile Met Val Thr Ser Ser Leu Thr Leu Leu Ala Pro Phe Ala
                        135
                                            140
Phe Ile Leu Ala Ser Tyr Gly Cys Ile Leu Gly Ala Val Leu Lys Met
                    150
                                        155
His Ser Ala Glu Gly Arg Lys Lys Ala Phe Ser Thr Cys Ser Ser His
                165
                                    170
Leu Thr Val Val Ile Ile Phe Tyr Gly Thr Ala Ile Ser Met Tyr Met
                                185
                                                    190
Met Pro Gln Asp Lys Ala Ser Arg Asp Lys Asp Lys Ile Ile Ser Met
                            200
Leu Tyr Gly Ile Val Thr Pro
```

210

```
<210> 2626
  <211> 217
  <212> PRT
  <213> Unknown (2921715-dir-0-8 conceptual translation of range 2-652)
 <400>2626
 Ile Ile Asp Ile Ser Tyr Ala Ser Asn Lys Val Pro Lys Met Leu Thr
                                      10
 Asn Leu Gly Leu Asn Lys Arg Lys Thr Ile Ser Phe Val Pro Cys Thr
             20
                                  25
 Met Gln Thr Phe Leu Tyr Met Ala Phe Ala His Thr Glu Cys Leu Ile
                             40
                                                  45
 Leu Val Met Met Ser Tyr Asp Arg Tyr Met Ala Ile Cys His Pro Leu
                         55
                                              60
 Gln Tyr Ser Val Ile Met Arg Trp Gly Val Cys Thr Val Leu Ala Val
                                         75
 Thr Ser Trp Ala Cys Gly Ser Leu Leu Ala Leu Val His Val Val Leu
                 85
                                     90
 Ile Leu Arg Leu Pro Phe Cys Gly Pro His Glu Ile Asn His Phe Phe
                                 105
 Cys Glu Ile Leu Ser Val Leu Lys Leu Ala Cys Ala Asp Thr Trp Leu
         115
                             120
                                                 125
 Asn Gln Val Val Ile Phe Ala Ala Ser Val Phe Ile Leu Val Gly Pro
                         135
                                             140
 Leu Cys Leu Val Leu Val Ser Tyr Ser Arg Ile Leu Ala Ala Ile Leu
                     150
                                         155
 Arg Ile Gln Ser Gly Glu Gly Arg Arg Lys Ala Phe Ser Thr Cys Ser
                165
                                     170
 Ser His Leu Cys Met Val Gly Leu Phe Phe Gly Ser Ala Ile Val Met
            180
                                 185
                                                     190
 Tyr Met Ala Pro Lys Ser Arg His Pro Glu Glu Gln Gln Lys Val Leu
                             200
 Ser Leu Phe Tyr Ser Leu Phe Asn Pro
<210> 2627
<211> 217
<212> PRT
<213> Unknown (2921709-dir-0-8 conceptual translation of range 2-652)
Ile Ile Asp Ile Ser Tyr Ala Ser Asn Asn Val Pro Lys Met Leu Thr
1
                                    10
Asn Leu Gly Leu Asn Lys Arg Lys Thr Ile Ser Phe Val Pro Cys Thr
            20
Met Gln Thr Phe Leu Tyr Met Ala Phe Ala His Thr Glu Cys Leu Ile
                             40
Leu Val Met Met Ser Tyr Asp Arg Tyr Met Ala Ile Cys His Pro Leu
                        55
Gln Tyr Ser Val Ile Met Arg Trp Gly Val Cys Thr Val Leu Ala Val
                                        75
Thr Ser Trp Ala Cys Gly Ser Leu Leu Ala Leu Val His Val Val Leu
                85
                                    90
Ile Leu Arg Leu Pro Phe Cys Gly Pro His Glu Ile Asn His Phe Phe
           100
                                105
Cys Glu Ile Leu Ser Val Leu Lys Leu Ala Cys Ala Asp Thr Trp Leu
       .115
                            120
                                                125
Asn Gln Val Val Ile Phe Ala Ala Ser Val Phe Ile Leu Val Gly Pro
                        135
                                            140
Leu Cys Leu Val Leu Val Ser Tyr Ser Arg Ile Leu Ala Ala Ile Leu
```

```
150
                                        155
Gly Ile Gln Ser Gly Glu Gly Arg Arg Lys Ala Phe Ser Thr Cys Ser
                165
                                    170
Ser His Leu Cys Met Val Gly Leu Phe Phe Gly Ser Ala Ile Val Met
            180
                               185
                                                   190
Tyr Met Ala Pro Lys Ser Arg His Pro Glu Glu Gln Gln Lys Val Leu
                           200
       195
Ser Leu Phe Tyr Ser Leu Phe Asn Pro
<210> 2628
<211> 157
<212> PRT
<213> Unknown (902194-dir-0-6 conceptual translation of range 2-472)
<400>2628
Ile Cys His Pro Leu His Tyr Ser Val Ile Met Ser Trp Arg Val Cys
        5
                                   10
Thr Val Gln Ala Val Thr Ser Trp Ala Cys Gly Ser Leu Leu Ala Leu
            20
                               25
Val His Val Ile Leu Ile Leu Arg Leu Pro Phe Cys Gly Pro His Glu
                            40
                                                45
Ile Asn His Phe Phe Cys Glu Ile Leu Ser Val Leu Lys Leu Ala Cys
Ala Asp Thr Arg Leu Asn Gln Val Val Ile Phe Ala Ala Ser Val Ser
                    70
                                        75
Ile Leu Val Gly Pro Leu Cys Leu Val Leu Val Ser Tyr Ser Arg Ile
                                    90
                85
Leu Phe Ala Ile Leu Arg Ile Gln Ser Gly Glu Gly Arg Arg Lys Ala
                               105
Phe Ser Thr Cys Ser Ser His Leu Cys Val Val Gly Leu Phe Phe Gly
                           120
Ser Ala Ile Val Met Tyr Met Ala Pro Lys Ser Asn His Pro Glu Glu
                       135
Gln Gln Lys Ile Leu Ser Leu Phe Tyr Ser Leu Phe Asn
                   150
<210> 2629
<211> 215
<213> Unknown (OST182-dir-0-8 conceptual translation of range 2-646)
<400>2629
Ile Val Asp Ile Ser Tyr Ala Ser Asn Tyr Val Pro Lys Met Leu Thr
                                   10
Asn Leu Met Asn Gln Glu Ser Thr Ile Ser Phe Phe Pro Cys Ile Met
                               25
Gln Thr Phe Leu Tyr Leu Ala Phe Ala His Val Glu Cys Leu Ile Leu
                           40
Val Val Met Ser Tyr Asp Arg Tyr Ala Asp Ile Cys His Pro Leu Arg
                       55
                                           60
Tyr Asn Ile Leu Met Ser Trp Arg Val Cys Thr Val Leu Ala Val Ala
                   70
                                       75
Ser Trp Val Phe Ser Phe Leu Leu Ala Leu Val Pro Leu Val Leu Ile
               85
                                   90
Leu Arg Leu Pro Phe Cys Gly Pro His Glu Ile Asn His Phe Cys Glu
                               105
Ile Leu Ser Val Leu Lys Leu Ala Cys Ala Asp Thr Trp Leu Asn Gln
                           120
                                               125
Val Val Ile Phe Ala Ala Cys Val Phe Ile Leu Val Gly Pro Leu Cys
                       135
```

Leu Val Leu Val Ser Tyr Leu Arg Ile Leu Ala Ala Ile Leu Arg Ile 155 150 Gln Ser Gly Glu Gly Arg Arg Lys Ala Phe Ser Thr Cys Ser Ser His 165 170 Leu Cys Val Val Gly Leu Phe Phe Gly Ser Ala Ile Val Thr Tyr Met 180 185 Ala Pro Lys Ser Arg His Pro Glu Glu Gln Gln Lys Val Leu Ser Leu 195 200 Phe Tyr Ser Leu Phe Asn Pro <210> 2630 <211> 352 <212> PRT <213> Unknown (4156187-rev-1021-13 conceptual translation of range 102238-<220> <221> VARIANT <222> (1)...(352) <223> Xaa = Any Amino Acid <400>2630 Leu Leu Val Phe Cys Leu Phe Leu Cys Leu Phe Phe Ser Ser Glu Met 1 10 Val Lys Asn Gln Thr Met Val Thr Glu Phe Leu Leu Leu Gly Phe Leu 20 25 30 Leu Gly Pro Arg Ile Gln Met Leu Leu Phe Gly Leu Phe Ser Leu Phe 40 Tyr Val Phe Thr Leu Leu Gly Asn Gly Thr Ile Leu Gly Leu Ile Ser 55 60 Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser His Leu 70 75 Ala Val Val Asn Ile Ala Tyr Ala Cys Asn Thr Val Pro Gln Met Leu 90 Val Asn Leu Leu His Pro Ala Lys Pro Ile Ser Phe Ala Gly Cys Met 105 Thr Xaa Thr Phe Leu Phe Leu Ser Phe Ala His Thr Glu Cys Leu Leu 115 120 125 Leu Val Leu Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu 135 140 Arg Tyr Phe Ile Ile Met Thr Trp Lys Val Cys Ile Thr Leu Ala Ile 150 155 Thr Ser Trp Thr Cys Gly Ser Leu Leu Ala Met Val His Val Ser Leu 165 170 Ile Leu Arg Leu Pro Phe Cys Gly Pro Arg Glu Ile Asn His Phe Phe 180 185 190 Cys Glu Ile Leu Ser Val Leu Arg Leu Ala Cys Ala Asp Thr Trp Leu / 195 200 205 Asn Gln Val Val Ile Phe Ala Ala Cys Met Phe Ile Leu Val Gly Pro 215 220 Leu Cys Leu Val Leu Val Ser Tyr Ser His Ile Leu Ala Ala Ile Leu 230 235 Arg Ile Gln Ser Gly Glu Gly Arg Arg Lys Ala Phe Ser Thr Cys Ser 245 250 255 Ser His Leu Cys Val Val Gly Leu Phe Phe Gly Ser Ala Ile Val Met 260 265 Tyr Met Ala Pro Lys Ser Arg His Pro Glu Glu Gln Gln Lys Val Leu 285 280 Phe Leu Phe Tyr Ser Ser Phe Asn Pro Met Leu Asn Pro Leu Ile Tyr

295

```
Asn Leu Arg Asn Val Glu Val Lys Gly Ala Leu Arg Arg Ala Leu Cys
                    310
                                        315
Lys Glu Ser His Ser Xaa Glu Val Xaa His Leu Asn Cys Gln Pro Gln
                325
                                    330
Leu Ser Arg Gly Leu Leu Met Pro Asn Tyr Cys Leu Asn Pro Glu Lys
                                345
<210> 2631
<211> 314
<212> PRT
<213> Unknown (4156187-rev-834-13 conceptual translation of range 83640-
<220>
<221> VARIANT
<222> (1)...(314)
<223> Xaa = Any Amino Acid
<400>2631
Glu Met Gly Glu Asn Gln Thr Met Val Thr Glu Phe Leu Leu Gly
                                    10
Phe Leu Leu Gly Pro Arg Ile Gln Met Leu Phe Gly Leu Phe Ser
                                25
Leu Phe Tyr Ile Phe Thr Leu Leu Gly Asn Gly Ala Ile Leu Gly Leu
                            40
                                                45
Ile Ser Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                        55
                                            60
His Leu Ala Val Val Asp Ile Ala Tyr Thr Arg Asn Thr Val Pro Gln
                    70
                                        75
Met Leu Ala Asn Leu Leu His Pro Ala Lys Pro Ile Ser Phe Ala Gly
                                    90
                85
Cys Met Thr Gln Thr Phe Leu Cys Leu Ser Phe Gly His Ser Glu Cys
                                105
Leu Leu Val Leu Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys His
                            120
Pro Leu Arg Tyr Ser Val Ile Met Thr Trp Arg Val Cys Ile Thr Leu
                        135
                                            140
Ala Val Thr Ser Trp Thr Cys Gly Ser Leu Leu Ala Leu Ala His Val
                    150
                                        155
Val Leu Ile Leu Arg Leu Pro Phe Ser Gly Pro His Glu Ile Asn His
                165
                                    170
Phe Phe Cys Glu Ile Leu Ser Val Leu Arg Leu Ala Cys Ala Asp Thr
                                185
Trp Leu Asn Gln Val Val Ile Phe Ala Ala Cys Val Phe Phe Leu Val
                            200
                                                205
Gly Pro Pro Ser Leu Val Leu Val Ser Tyr Ser His Ile Leu Ala Ala
                        215
                                            220
Ile Leu Arg Ile Gln Ser Gly Glu Gly Arg Arg Lys Ala Phe Ser Thr
                   230
                                        235
Cys Ser Ser His Leu Cys Val Val Gly Leu Phe Phe Gly Ser Ala Ile
               245
                                  - 250
Ile Met Tyr Met Ala Pro Lys Ser Arg His Pro Glu Glu Gln Gln Lys
           260
                                265
Val Phe Phe Leu Phe Tyr Ser Phe Phe Asn Pro Thr Leu Asn Pro Leu
       275
                           280
                                               285
Ile Tyr Ser Leu Arg Asn Gly Glu Val Lys Gly Ala Leu Arg Arg Ala
                       295
Leu Gly Lys Glu Ser His Ser Xaa Leu Val
                   310
```

<210> 2632

```
<211> 223
<212> PRT
<213> Unknown (3983369-dir-0-8 conceptual translation of range 1-669)
<400>2632
Ser His Leu Ala Ile Val Asp Met Ala Tyr Ala Cys Asn Thr Val Pro
                                    10
Gln Thr Leu Ile Asn Leu Leu Asp Glu Thr Arg Pro Ile Thr Phe Ala
                               25
           20
Gly Cys Met Thr Gln Thr Tyr Leu Phe Leu Thr Phe Ala Ile Thr Glu
                           40
Cys Leu Leu Leu Val Val Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys
                                           60
                       55
His Pro Leu His Tyr Thr Val Ile Met Asn Trp Arg Val Cys Thr Ile
                                       75
                   70
Met Ala Ala Val Ser Trp Ile Val Ser Phe Leu Leu Ser Leu Val His
                                   90
Leu Leu Leu Ile Leu Arg Leu Pro Phe Cys Gly Pro His Glu Ile Asn
                               105
           100
His Phe Phe Cys Glu Ile Leu Ser Val Leu Lys Leu Ala Cys Ala Asp
                                                125
                           120
Thr Thr Leu Asn Gln Val Val Ile Phe Ala Ala Cys Val Phe Thr Leu
                       135
                                            140
Val Gly Pro Leu Cys Phe Val Leu Val Ser Tyr Thr Arg Ile Leu Val
                                        155
Ala Ile Leu Arg Ile Gln Ser Gly Glu Arg Arg Arg Lys Ala Phe Ser
                                    170
               165
Thr Cys Ser Ser His Leu Cys Val Val Gly Leu Phe Phe Gly Ser Ala
                                185
Ile Val Met Tyr Met Ala Pro Lys Ser Gln His Pro Gly Glu Gln Gln
                                                205
                           200
Lys Ile Leu Phe Leu Phe Tyr Ser Phe Phe Asn Pro Met Leu Asn
                       215
<210> 2633
<211> 216
<212> PRT
<213> Unknown (OST008-dir-0-8 conceptual translation of range 2-649)
<400>2633
Ile Ile Asp Met Ser Tyr Ala Ser Asn Asn Val Pro Lys Met Leu Ala
                                    10
Asn Leu Met Asn Gln Lys Arg Thr Ile Ser Phe Val Pro Cys Ile Met
                                25
           20
Gln Thr Phe Leu Tyr Leu Ala Phe Ala Val Thr Glu Cys Leu Ile Leu
                           40
                                                45
Val Val Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Phe Gln
                       55
                                            60
Tyr Thr Val Ile Met Ser Trp Arg Val Cys Thr Ile Leu Val Leu Thr
                                        75
                   70
Ser Trp Ser Cys Gly Phe Ala Leu Ser Leu Val His Glu Ile Leu Leu
                                    90
               85
Leu Arg Leu Pro Phe Cys Gly Pro Arg Asp Val Asn His Leu Phe Cys
                                105
Glu Ile Leu Ser Val Leu Lys Leu Ala Cys Ala Asp Thr Trp Val Asn
                           120
                                                125
Gln Val Val Ile Phe Ala Thr Cys Val Phe Val Leu Val Gly Pro Leu
                       135
                                            140
Ser Leu Ile Leu Val Ser Tyr Met His Ile Leu Gly Ala Ile Leu Lys
                                       155
                   150
Ile Gln Thr Lys Glu Gly Arg Ile Lys Ala Phe Ser Thr Cys Ser Ser
```

```
165
                                     170
 His Leu Cys Val Val Gly Leu Phe Phe Gly Ile Ala Met Val Val Tyr
                                185
                                                     190
 Met Val Pro Asp Ser Asn Gln Arg Glu Glu Glu Lys Met Leu Ser
                             200
                                                 205
 Leu Phe His Ser Val Leu Asn Pro
     210
 <210> 2634
 <211> 310
 <212> PRT
 <213> Unknown (4156187-dir-87-12 conceptual translation of range 8841-9771)
 <400>2634
 Met Gly Asp Asn Gln Ser Arg Val Thr Glu Phe Ile Leu Val Gly Phe
                                     10
 Gln Leu Ser Val Glu Met Glu Val Leu Leu Phe Trp Ile Phe Ser Leu
             20
 Leu Tyr Leu Phe Ser Leu Leu Ala Asn Gly Met Ile Leu Gly Leu Ile
 Cys Leu Asp Pro Arg Leu Arg Thr Pro Met Tyr Phe Phe Leu Ser His
 Leu Ala Val Ile Asp Ile Tyr Tyr Ala Ser Ser Asn Leu Leu Asn Met
                    70
                                         75
Leu Glu Asn Leu Val Lys His Lys Lys Asn Tyr Pro Phe Ile Ser Cys
                85
                                    90
Ile Met Gln Met Ala Leu Tyr Leu Thr Phe Ala Ala Ala Val Cys Met
            100
                                105
Ile Leu Val Val Met Ser Tyr Asp Arg Phe Val Ala Ile Cys His Pro
                            120
                                                125
Leu His Tyr Thr Val Ile Met Asn Trp Arg Val Cys Thr Val Leu Ala
                        135
                                            140
Ile Thr Ser Trp Ala Cys Gly Phe Ser Leu Ala Leu Ile Asn Leu Ile
                    150
                                        155
Leu Leu Arg Leu Pro Phe Cys Gly Pro Gln Glu Val Asn His Phe
                                    170
Phe Gly Glu Ile Leu Ser Val Leu Lys Leu Ala Cys Ala Asp Thr Trp
                                185
                                                    190
Ile Asn Glu Ile Phe Val Phe Ala Gly Gly Val Phe Val Leu Val Gly
                            200
                                                205
Pro Leu Ser Leu Met Leu Ile Ser Tyr Met Arg Ile Leu Leu Ala Ile
                        215
Leu Lys Ile Gln Ser Lys Glu Gly Arg Lys Lys Ala Phe Ser Thr Cys
                    230
                                       235
Ser Ser His Leu Cys Val Val Gly Leu Tyr Phe Gly Met Ala Met Val
                245
                                   250
Val Tyr Leu Val Pro Asp Asn Ser Gln Arg Gln Lys Gln Gln Lys Ile
            260
                                265
Leu Thr Leu Phe Tyr Ser Leu Phe Asn Pro Leu Leu Asn Pro Leu Ile
                            280
                                                285
Tyr Ser Leu Arg Asn Ala Gln Val Lys Gly Ala Leu Tyr Arg Ala Leu
                        295
Gln Lys Lys Arg Thr Met
<210> 2635
<211> 339
<212> PRT
<213> Unknown (4156187-rev-1102-12 conceptual translation of range 110295-
111311)
```

```
<220>
<221> VARIANT
<222> (1)...(339)
<223> Xaa = Any Amino Acid
<400>2635
Ile Cys Phe Xaa Thr Leu Leu Leu Asn His Glu His Xaa Leu Asp Phe
                                    10
Leu Cys His Arg Asp Met Gly Asp Asn Ile Thr Ser Ile Thr Glu Phe
            20
                                25
Leu Leu Gly Phe Pro Val Gly Pro Arg Ile Gln Met Leu Leu Phe
                                                45
Gly Leu Phe Ser Leu Phe Tyr Val Phe Thr Leu Leu Gly Asn Gly Thr
                55
Ile Leu Gly Leu Ile Ser Leu Asp Ser Arg Leu His Ala Pro Met Tyr
                                        75
                    70
Phe Phe Leu Ser His Leu Ala Val Val Asp Ile Ala Tyr Ala Cys Asn
               85
                                   90
Thr Val Pro Arg Met Leu Val Asn Leu Leu His Pro Ala Lys Pro Ile
                                                   110
                               105
Ser Phe Ala Gly Arg Met Met Gln Thr Phe Leu Phe Ser Thr Phe Ala
                                                125
                           120
Val Thr Glu Cys Leu Leu Leu Val Val Met Ser Tyr Asp Leu Tyr Val
                       135
                                            140
Ala Ile Cys His Pro Leu Arg Tyr Leu Ala Ile Met Thr Trp Arg Val
                                        155
                    150
Cys Ile Thr Leu Ala Val Thr Ser Trp Thr Thr Gly Val Leu Leu Ser
                                    170
Leu Ile His Leu Val Leu Leu Pro Leu Pro Phe Cys Arg Pro Gln
                                185
Lys Ile Tyr His Phe Phe Cys Glu Ile Leu Ala Val Leu Lys Leu Ala
                           200
                                                205
Cys Ala Asp Thr His Ile Asn Glu Asn Met Val Leu Ala Gly Ala Ile
                        215
                                            220
Ser Gly Leu Val Gly Pro Leu Ser Thr Ile Val Val Ser Tyr Met Cys
                                       235
                    230
Ile Leu Cys Ala Ile Leu Gln Ile Gln Ser Arg Glu Val Gln Arg Lys
                                    250
                245
Ala Phe Cys Thr Cys Phe Ser His Leu Cys Val Ile Gly Leu Phe Tyr
                                                    270
            260
                                265
Gly Thr Ala Ile Ile Met Tyr Val Gly Pro Arg Tyr Gly Asn Pro Lys
                                                285
                            280
Glu Gln Lys Lys Tyr Leu Leu Leu Phe His Ser Leu Phe Asn Pro Met
                                           300
                        295
Leu Asn Pro Leu Ile Cys Ser Leu Arg Asn Ser Glu Val Lys Asn Thr
                                       315
                   310
Leu Lys Arg Val Leu Gly Val Glu Arg Ala Leu Xaa Lys Gly Leu Trp
                                    330
                325
His Cys Asp
<210> 2636
<211> 339
<212> PRT
<213> Unknown (4156166-dir-1014-13 conceptual translation of range 101536-
102552)
<220>
<221> VARIANT
<222> (1)...(339)
<223> Xaa = Any Amino Acid
```

```
<400>2636
Ile Cys Phe Xaa Thr Leu Leu Leu Asn His Glu His Xaa Leu Asp Phe
                                    10
Leu Cys His Arg Asp Met Gly Asp Asn Ile Thr Ser Ile Arg Glu Phe
            20
                                25
Leu Leu Gly Phe Pro Val Gly Pro Arg Ile Gln Met Leu Leu Phe
                            40
Gly Leu Phe Ser Leu Phe Tyr Val Phe Thr Leu Leu Gly Asn Gly Thr
                        55
Ile Leu Gly Leu Ile Ser Leu Asp Ser Arg Leu His Ala Pro Met Tyr
                                        75
                    70
Phe Phe Leu Ser His Leu Ala Val Val Asp Ile Ala Tyr Ala Cys Asn
                85
                                    90
                                                        95
Thr Val Pro Arg Met Leu Val Asn Leu Leu His Pro Ala Lys Pro Ile
            100
                               105
                                                    110
Ser Phe Ala Gly Arg Met Met Gln Thr Phe Leu Phe Ser Thr Phe Ala
        115
                            120
                                                125
Val Thr Glu Cys Leu Leu Val Val Met Ser Tyr Asp Leu Tyr Val
                        135
                                            140
Ala Ile Cys His Pro Leu Arg Tyr Leu Ala Ile Met Thr Trp Arg Val
                    150
                                        155
Cys Ile Thr Leu Ala Val Thr Ser Trp Thr Thr Gly Val Leu Leu Ser
                                   170
               165
                                                        175
Leu Ile His Leu Val Leu Leu Pro Leu Pro Phe Cys Arg Pro Gln
                               185
Lys Ile Tyr His Phe Phe Cys Glu Ile Leu Ala Val Leu Lys Leu Ala
        195
                            200
                                               205
Cys Ala Asp Thr His Ile Asn Glu Asn Met Val Leu Ala Gly Ala Ile
                        215
                                            220
Ser Gly Leu Val Gly Pro Leu Ser Thr Ile Val Val Ser Tyr Met Cys
                    230
                                        235
Ile Leu Cys Ala Ile Leu Gln Ile Gln Ser Arg Glu Val Gln Arg Lys
                245
                                    250
                                                        255
Ala Phe Arg Thr Cys Phe Ser His Leu Cys Val Ile Gly Leu Val Tyr
                                265
Gly Thr Ala Ile Ile Met Tyr Val Gly Pro Arg Tyr Gly Asn Pro Lys
        275
                           280
                                                285
Glu Gln Lys Lys Tyr Leu Leu Phe His Ser Leu Phe Asn Pro Met
                       295
                                            300
Leu Asn Pro Leu Ile Cys Ser Leu Arg Asn Ser Glu Val Lys Asn Thr
                    310
                                       315
Leu Lys Arg Val Leu Gly Val Glu Arg Ala Leu Xaa Lys Gly Leu Trp
                325
His Cys Asp
<210> 2637
<211> 222
<212> PRT
<213> Unknown (293753-dir-0-8 conceptual translation of range 2-667)
<400>2637
Phe Phe Leu Ser His Leu Ala Ile Val Asp Ile Ala Tyr Ala Cys Asn
                5
                                   10
                                                       15
Thr Val Pro Gln Met Leu Val Asn Leu Leu Asp Pro Val Lys Pro Ile
                                25
Ser Tyr Ala Gly Cys Met Thr Gln Thr Phe Leu Phe Leu Thr Phe Ala
       35
                            40
Ile Thr Glu Cys Leu Leu Val Val Met Ser Tyr Asp Arg Tyr Val
                       55
                                           60
```

```
Ala Ile Cys His Pro Leu Arg Tyr Ser Ala Ile Met Ser Trp Arg Val
                                        75
                    70
Cys Ser Thr Met Ala Val Thr Ser Trp Ile Ile Gly Val Leu Leu Ser
                85
                                    90
Leu Ile His Leu Val Leu Leu Pro Leu Pro Phe Cys Val Ser Gln
                                105
                                                    110
Lys Val Asn His Phe Phe Cys Glu Ile Thr Ala Ile Leu Lys Leu Ala
                            120
                                                125
Cys Ala Asp Thr His Leu Asn Glu Thr Met Val Leu Ala Gly Ala Val
                                            140
                       135
Ser Val Leu Val Gly Pro Phe Ser Ser Ile Val Val Ser Tyr Ala Cys
                    150
                                        155
Ile Leu Gly Ala Ile Leu Lys Ile Gln Ser Glu Glu Gly Gln Arg Lys
                                    170
                165
Ala Phe Ser Thr Cys Ser Ser His Leu Cys Val Val Gly Leu Phe Tyr
            180
                                185
Gly Thr Ala Ile Val Met Tyr Val Gly Pro Arg His Gly Ser Pro Lys
                          200
                                                205
       195
Glu Gln Lys Lys Tyr Leu Leu Leu Phe His Ser Leu Phe Asn
<210> 2638
<211> 114
<212> PRT
<213> Unknown (892-dir-0-5 conceptual translation of range 2-343)
<400>2638
Ile Cys His Pro Leu Arg Tyr Lys Val Ile Met Ser Arg Trp Met Cys
                                    10
1
Leu Leu Met Val Gly Ile Cys Gly Val Tyr Gly Val Val Gly Ser Leu
            20
                                25
Cys Tyr Thr Phe Phe Ala Met Arg Leu Pro Tyr Cys Gly Pro Asn Glu
                            40
                                                45
Ile Asp His Tyr Phe Cys Glu Val Pro Ala Val Leu Lys Leu Ala Cys
                                            60
                      55
Ala Asp Thr Ser Leu Asn Asp Leu Val Asp Phe Ile Thr Gly Phe Asn
                    70
Val Ile Val Val Pro Leu Thr Leu Val Val Ile Val Tyr Ala Asn Ile
                                    90
Phe Ala Thr Ile Met Lys Ile Arg Ser Ala Gln Gly Gln Ile Lys Ala
                                105
            100
Phe Ser
<210> 2639
<211> 350
<212> PRT
<213> Unknown (2331266-dir-0-13 conceptual translation of range 111-1160)
<220>
<221> VARIANT
<222> (1) . . . (350)
<223> Xaa = Any Amino Acid
<400>2639
Leu Ala Gln Asn Ile Lys Arg Lys Thr Ala Met Asn Ser Val Asn Ala
                                    10
                5
1
Ser Phe Tyr Gln Asn Ile Ser Ile Val Arg Pro Glu Tyr Phe Phe Ile
                               25
                                                    30
Ser Gly Leu Ser Gly Ile Pro Tyr Ser Ser Tyr Tyr Tyr Ile Phe Leu
                            40
       35
```

```
Phe Val Val Tyr Phe Ile Ser Val Ile Gly Asn Ser Val Val Leu Leu
Ile Ile Ala Val Asp Arg Ser Leu His Ser Pro Lys Tyr Ile Gly Val
Phe Asn Leu Ala Leu Ala Asp Ile Gly Glu Thr Asn Ala Leu Ile Pro
                                    90
Asn Met Met Lys Thr Phe Leu Phe Asn Ser Gln Tyr Ile Ser Tyr Asn
                                105
Gly Cys Met Ala Asn Met Phe Phe Val Val Leu Phe Asn Ser Ile Gln
       115
                            120
Ser Phe Thr Leu Val Ala Leu Ala Tyr Asp Arg Phe Ile Ala Ile Cys
                                            140
                        135
Leu Pro Leu Arg Tyr His Ala Ile Val Asn Asn Thr Ser Met Ile Leu
                                       155
                    150
Ile Phe Leu Ala Ile Trp Ala Phe Asn Ser Ser Val Val Ala Ser Met
                                   170
                165
Val Ser Met Ile Thr Arg Leu Ser Ile Cys Lys Ser Asn Val Ile Pro
                               185
            180
Ser Tyr Phe Cys Asp His Gly Pro Ile Phe Arg Leu Ala Cys Asn Asp
                                               205
                            200
       195
Ile Lys Ile Asn Glu Phe Phe Ala Phe Phe Ile Ser Ile Leu Tyr Leu
                                            220
                        215
Thr Met Pro Met Val Ile Ile Ala Leu Ser Tyr Leu Asn Ile Phe Leu
                                       235
                   230
Ala Leu Ile Lys Ile Thr Thr Trp Glu Gly Arg Leu Lys Ala Leu Lys
                245
                                   250
Thr Cys Val Ser His Leu Leu Leu Val Gly Ile Phe Phe Leu Pro Leu
            260
                                265
Leu Cys Thr Tyr Ile Ala Gln Val Leu Leu Ala Leu Thr Pro Asn Ala
                            280
        275
Arg Val Ile Ser Thr Ser Leu Ser Tyr Ala Ile Pro Pro Met Leu Asn
                        295
Pro Ile Ile Tyr Val Leu Asn Thr Ala Glu Ile Lys Tyr Ile Ile Arg
                                        315
                    310
Lys Leu Phe Lys Arg Arg Leu Arg Ser Val Ser Asp Asn Ile Ser Lys
                                    330
Xaa Phe Cys Ser Cys Trp Gly Leu Tyr Gln Ser Lys Lys
<210> 2640
<211> 353
<212> PRT
<213> Unknown (2331262-dir-1-13 conceptual translation of range 199-1257)
<220>
<221> VARIANT
<222> (1)...(353)
<223> Xaa = Any Amino Acid
<400>2640
Val Gln Asn Thr Lys Cys Lys Val Ala Met Ser Ser Leu Asn Ala Ser
                                    10
Phe Ser Leu Asn Ile Ser Val Val Arg Pro Glu Tyr Phe Phe Ile Leu
Gly Leu Ser Gly Ile Pro Tyr Ser Asn Leu Tyr Tyr Ile Phe Ile Phe
                            40
Ile Ile Tyr Phe Ile Thr Val Ile Gly Asn Phe Leu Val Ile Leu Leu
                        55
Ile Val Leu Asp Arg Ser Leu His Ser Pro Lys Tyr Ile Gly Val Phe
                    70
                                        75
Asn Leu Ala Leu Ala Asp Ile Gly Glu Thr Asn Ala Leu Ile Pro Asn
```

į

```
90
Met Met Lys Thr Phe Leu Phe Asp Ser Gln Tyr Ile Ser Tyr Asn Ala
                               105
                                                    110
            100
Cys Leu Val Asn Met Phe Phe Val Phe Leu Phe Ser Ser Met Gln Ser
                           120
                                                125
Leu Thr Leu Val Val Met Ala Tyr Asp Arg Leu Ile Ala Ile Cys Leu
                        135
                                            140
Pro Leu Arg Tyr His Val Ile Val Asn Asn Thr Ser Met Ile Ser Ile
                                       155
                   150
Phe Ser Ala Val Phe Met Phe Asn Ser Ile Ile Val Ala Ser Met Val
                                   170
                165
Ser Leu Val Thr Asn Ile Ser Phe Cys Lys Ser Asn Val Ile Gln Ser
                               185
           180
Tyr Phe Cys Asp His Gly Pro Met Phe Arg Met Ala Cys Asn Asp Asn
                           200
                                                205
Asn Ile Asn Lys Ile Met Gly Phe Leu Tyr Thr Thr Leu Tyr Leu Ile
                       215
                                            220
Ala Pro Met Leu Val Ile Phe Leu Ser Tyr Leu Gly Ile Phe Leu Val
                                        235
                    230
Val Ser Lys Ile Ala Thr Trp Glu Arg Arg Leu Lys Ala Leu Lys Thr
                                    250
                245
Cys Val Ser His Leu Leu Leu Val Gly Ile Tyr Phe Leu Pro Ile Phe
                                265
Phe Thr Tyr Leu Thr Ser Leu Leu Phe Ser Thr Ser Asn Ser Arg
        275
                            280
                                                285
Val Ile Ser Thr Ser Leu Ala Tyr Ala Ile Pro Pro Met Leu Asn Pro
                                            300
                        295
Ile Ile Tyr Val Leu Asn Thr Ala Glu Ile Lys Asn Thr Ile Arg Lys
                                        315
                    310
Gly Phe Lys Asn Arg Ser Leu Pro Ile Glu Thr Val Ser Lys Xaa Ile
               325
                                    330
Lys Arg Leu Phe Phe Ile Val Xaa Tyr His Lys Tyr Asp Phe Cys Ile
                                345
           340
Cys
<210> 2641
<211> 351
<212> PRT
<213> Unknown (4726083-dir-262-12 conceptual translation of range 26289-
27340)
<220>
<221> VARIANT
<222> (1)...(351)
<223> Xaa = Any Amino Acid
<400>2641
Leu Ser Pro Ser Leu Lys Pro Ser Cys Asn Cys Asp Pro Thr Met Trp
                5
Pro Asn Ser Ser Asp Ala Pro Phe Leu Leu Thr Gly Phe Leu Gly Leu
                                25
Glu Met Ile His His Trp Ile Ser Ile Pro Phe Phe Val Ile Tyr Phe
Ser Ile Ile Val Gly Asn Gly Thr Leu Leu Phe Ile Ile Trp Ser Asp
                        55
                                            60
His Ser Leu His Glu Pro Met Tyr Tyr Phe Leu Ala Val Leu Ala Ser
                                        75
                    70
Met Asp Leu Gly Met Thr Leu Thr Thr Met Pro Thr Val Leu Gly Val
                                    90
Leu Val Leu Asn Gln Arg Glu Ile Val His Gly Ala Cys Phe Ile Gln
```

```
100
                                105
 Ser Tyr Phe Ile His Ser Leu Ala Ile Val Glu Ser Gly Val Leu Leu
                         120
                                                125
 Ala Met Ser Tyr Asp Arg Phe Val Ala Ile Cys Thr Pro Leu His Tyr
                        135
                                            140
 Asn Ser Ile Leu Thr Asn Ser Arg Val Met Lys Met Ala Leu Gly Ala
                    150
                                        155
 Leu Leu Arg Gly Phe Val Ser Ile Val Pro Pro Ile Met Pro Leu Phe
                                    170
 Trp Phe Pro Tyr Cys His Ser His Val Leu Ser His Ala Phe Cys Leu
                                185
His Gln Asp Val Met Lys Leu Ala Cys Ala Asp Ile Thr Phe Asn Leu
                            200
 Ile Tyr Pro Val Val Leu Val Ala Leu Thr Phe Phe Leu Asp Ala Leu
                       215
                                            220
Ile Ile Ile Phe Ser Tyr Val Leu Ile Leu Lys Lys Val Met Gly Ile
                    230
                                        235
Ala Ser Gly Glu Glu Arg Lys Lys Ser Leu Asn Thr Cys Val Ser His
                245
                                   250
Ile Ser Cys Val Leu Val Phe Tyr Ile Thr Val Ile Gly Leu Thr Phe
                               265
Ile His Arg Phe Gly Lys Asn Ala Pro His Val Val His Ile Thr Met
                           280
                                                285
Ser Tyr Val Tyr Phe Leu Phe Pro Pro Phe Met Asn Pro Ile Ile Tyr
                        295
                                            300
Ser Ile Lys Thr Lys Gln Ile Gln Arg Ser Ile Leu Arg Leu Leu Ser
                    310
                                        315
Lys His Ser Arg Thr Xaa Ile Leu Ile Ile Asp Ser Gln Val Leu Tyr
                325
                                    330
Tyr Phe Trp Pro Phe Ile Arg Asn Lys Ser Cys Leu Lys Xaa Tyr
                                345
<210> 2642
<211> 159
<212> PRT
<213> Unknown (4680279-dir-0-6 conceptual translation of range 2-478)
<400>2642
Asn Pro Leu Arg Tyr Thr Ser Ile Leu Thr Ser Ala Arg Val Leu Gln
Ile Gly Leu Ala Phe Ser Leu Lys Asn Val Leu Leu Ile Leu Pro Phe
                                25
Pro Val Thr Leu Val Arg Leu Arg Tyr Cys Lys Lys Asn Leu Leu Ser
                           40
                                                45
His Ser Tyr Cys Leu His Gln Asp Val Met Lys Leu Ala Cys Ser Asp
                        55
Asn Lys Phe Asn Val Ile Tyr Gly Leu Phe Val Ala Leu Thr Gly Ile
                                        75
Leu Asp Ile Thr Phe Ile Phe Met Ser Tyr Ala Leu Ile Leu Arg Ala
Val Leu Gly Ile Ala Ser Gln Arg Glu Arg Leu Lys Val Leu Ser Thr
           100
                               105
Cys Val Ser His Ile Cys Ala Val Leu Ile Phe Tyr Val Pro Val Ile
                            120
                                               125
Ser Leu Ala Val Ile Tyr Arg Leu Ala Ser Arg Ser Ser Pro Ile Ser
                       135
Lys Ile Leu Met Ala Asp Ile Phe Leu Leu Val Pro Pro Val Met
                   150
                                      155
<210> 2643
<211> 160
```

1610

<212> PRT <213> Unknown (902668-dir-0-6 conceptual translation of range 2-481) <400>2643 Ile Ser Asn Pro Leu Arg Tyr Ala Ser Val Leu Thr Asn Asn Val Ile 10 Ile Arg Ile Gly Val Ala Ile Thr Thr Arg Ala Thr Leu Ser Leu Leu 20 25 Pro Leu Pro Phe Leu Leu Lys Arg Leu Asn Tyr Cys Pro Gly Lys Ile 40 45 Leu Leu Ser His Ser Phe Cys Phe His Ala Asp Val Met Lys Leu Ala 55 Cys Ala Asp Ile Thr Val Asn Ile Leu Tyr Gly Leu Tyr Val Val Leu 65 75 Ser Thr Val Gly Ile Asp Ser Leu Leu Ile Val Met Ser Tyr Ser Leu 90 Ile Leu His Thr Val Met Gly Leu Ala Ser Pro Arg Glu Arg Val Arg 100 105 Thr Leu Asn Thr Cys Val Ser His Ile Ser Ala Val Leu Val Phe Tyr 120 Ile Pro Val Ile Gly Val Ser Met Ile His Arg Phe Gly Lys His Leu 135 140 Pro His Ile Val His Ala Leu Val Ala Tyr Val Tyr Leu Val Val Pro <210> 2644 <211> 316 <212> PRT <213> Unknown (3927807-dir-288-13 conceptual translation of range 29007-29954) <400>2644 Leu Asn Met Tyr Pro Arg Asn Ser Ser Gln Ala Gln Pro Phe Leu Leu 10 Ala Gly Leu Pro Gly Met Ala Gln Phe His His Trp Val Phe Leu Pro 2.0 25 30 Phe Gly Leu Met Tyr Leu Val Ala Val Leu Gly Asn Gly Thr Ile Leu 40 Leu Val Val Arg Val His Arg Gln Leu His Gln Pro Met Tyr Tyr Phe 55 60 Leu Leu Met Leu Ala Thr Thr Asp Leu Gly Leu Thr Leu Ser Thr Leu 70 75 Pro Thr Val Leu Arg Val Phe Trp Leu Gly Ala Met Glu Ile Ser Phe 90 Pro Ala Cys Leu Ile Gln Met Phe Cys Ile His Val Phe Ser Phe Met 105 110 Glu Ser Ser Val Leu Leu Ala Met Ala Phe Asp Arg Tyr Val Ala Ile 120 125 Cys Cys Pro Leu Arg Tyr Ser Ser Ile Leu Thr Gly Ala Arg Val Ala 135 140 Gln Ile Gly Leu Gly Ile Ile Cys Arg Cys Thr Leu Ser Leu Leu Pro 150 155 Leu Ile Cys Leu Leu Thr Trp Leu Pro Phe Cys Arg Ser His Val Leu 165 170 Ser His Pro Tyr Cys Leu His Gln Asp Ile Ile Arg Leu Ala Cys Thr 180 185 Asp Ala Thr Leu Asn Ser Leu Tyr Gly Leu Ile Leu Val Leu Val Ala 195 200 205 Ile Leu Asp Phe Val Leu Ile Ala Leu Ser Tyr Ile Met Ile Phe Arg 215 220 Thr Val Leu Gly Ile Thr Ser Lys Glu Glu Gln Thr Lys Ala Leu Asn

```
230
                                        235
Thr Cys Val Ser His Phe Cys Ala Val Leu Ile Phe Tyr Ile Pro Leu
                245
                                    250
Ala Gly Leu Ser Ile Ile His Arg Tyr Gly Arg Asn Ala Pro Pro Ile
            260
                                265
Ser His Ala Val Met Ala Asn Val Tyr Leu Phe Val Pro Pro Ile Leu
                           280
                                                285
        275
Asn Pro Val Leu Tyr Ser Met Lys Ser Lys Ala Ile Cys Lys Gly Leu
                       295
Leu Arg Leu Leu Cys Gln Arg Ala Ala Trp Pro Gly
                   310
<210> 2645
<211> 316
<212> PRT
<213> Unknown (4761596-dir-254-13 conceptual translation of range 25614-
26561)
<400>2645
Phe His Asn Asp Thr Asn Pro Gln Asp Val Trp Tyr Val Leu Ile Gly
                                    10
Ile Pro Gly Leu Glu Asp Leu His Ser Trp Ile Ala Ile Pro Ile Cys
            20
                                25
Ser Met Tyr Ile Val Ala Val Ile Gly Asn Val Leu Leu Ile Phe Leu
                           40
                                                45
Ile Val Thr Glu Arg Ser Leu His Glu Pro Met Tyr Phe Phe Leu Ser
                        55
                                            60
Met Leu Ala Leu Ala Asp Leu Leu Leu Ser Thr Ala Thr Ala Pro Lys
Met Leu Ala Ile Phe Trp Phe His Ser Arg Gly Ile Ser Phe Gly Ser
                                    90
Cys Val Ser Gln Met Phe Phe Ile His Phe Ile Phe Val Ala Glu Ser
                                105
Ala Ile Leu Leu Ala Met Ala Phe Asp Arg Tyr Val Ala Ile Cys Tyr
                            120
Pro Leu Arg Tyr Thr Thr Ile Leu Thr Ser Ser Val Ile Gly Lys Ile
                        135
                                            140
Gly Thr Ala Ala Val Val Arg Ser Phe Leu Ile Cys Phe Pro Phe Ile
                    150
                                        155
Phe Leu Val Tyr Arg Leu Leu Tyr Cys Gly Lys His Ile Ile Pro His
               165
                                   170
Ser Tyr Cys Glu His Met Gly Ile Ala Arg Leu Ala Cys Asp Asn Ile
           180
                               185
                                                   190 -
Thr Val Asn Ile Ile Tyr Gly Leu Thr Met Ala Leu Leu Ser Thr Gly
                           200
                                                205
Leu Asp Ile Leu Leu Ile Ile Ser Tyr Thr Met Ile Leu Arg Thr
                                            220
                       215
Val Phe Gln Ile Pro Ser Trp Ala Ala Arg Tyr Lys Ala Leu Asn Thr
                   230
                                        235
Cys Gly Ser His Ile Cys Val Ile Leu Leu Phe Tyr Thr Pro Ala Phe
               245
                                   250
Phe Ser Phe Phe Ala His Arg Phe Gly Gly Lys Thr Val Pro Arg His
                                265
Ile His Ile Leu Val Ala Asn Leu Tyr Val Val Pro Pro Met Leu
                            280
Asn Pro Ile Ile Tyr Gly Val Lys Thr Lys Gln Ile Gln Asp Arg Val
                       295
Val Phe Leu Phe Ser Ser Val Ser Thr Cys Gln His
                   310
```

<210> 2646

```
<211> 159
<212> PRT
<213> Unknown (2564519-dir-0-6 conceptual translation of range 1-477)
Ile Cys Asn Pro Leu Arg Tyr Ala Val Met Leu Thr Asn Ile Val Ile
                                     10
Arg Lys Ile Ala Ile Leu Ala Val Val Arg Gly Leu Cys Val Val Ala
            20
                                25
Pro Phe Thr Phe Leu Leu His Arg Leu Pro Tyr Cys Gln Asn Asn Val
Val Pro His Thr Tyr Cys Glu His Met Gly Ile Ala Lys Leu Ala Cys
                        55
Ala Asp Val Thr Val Asn Ser Val Tyr Gly Leu Thr Ile Ala Leu Ser
                    70
                                        75
Ile Thr Gly Leu Asp Ala Ala Leu Val Val Ala Ser Tyr Val Leu Ile
                85
                                    90
Leu Arg Ala Val Leu Asn Met Asn Ser Met Thr Ala Arg His Lys Ala
                                105
Leu Ser Thr Cys Ala Ser His Val Cys Val Ile Ile Leu Phe Cys Val
                            120
Pro Ala Phe Phe Ser Phe Phe Ala His Arg Phe Gly Lys Asn Ile Pro
                        135
                                            140
Leu Asn Val His Ile Phe Val Ala Asn Leu Tyr Ile Leu Leu Pro
                   150
                                        155
<210> 2647
<211> 158
<212> PRT
<213> Unknown (1644474-dir-0-6 conceptual translation of range 1-474)
<400>2647
Lys Pro Leu His Tyr Asn Glu Ile Met Asn Ser Ser Met Phe Leu Lys
                                    10
Leu Phe Leu Phe Thr Leu Ile Arg Ser Gly Thr Ile Met Ser Thr Leu
Val Ala Leu Ala Ser Pro Leu Ser Phe Cys Gly Ser Asn Val Ile Tyr
                            40
His Cys Tyr Cys Asp His Met Ala Leu Val Ser Leu Ala Cys Asp Ser
                                            60
                        55
Ile Ala Gln Asn Gln Thr Met Gly Leu Ile Val Ile Ile Cys Phe Val
                    70
                                        75
Gly Ile Asp Thr Ser Val Ile Phe Phe Ser Tyr Val Lys Ile Leu His
                                    90
               85
Val Val Leu Gly Thr Ala Ala Gly Glu Asp Arg Trp Lys Ala Phe His
            100
                                105
                                                    110
Thr Cys Gly Thr His Leu Met Val Met Ile Cys Phe Tyr Phe Val Gly
       115
                            120
                                                125
Ser Val Thr Phe Leu Ser Arg Asn Leu Asn Ile Pro Ile Pro Ile Asp
                       135
                                            140
Val Asn Thr Phe Leu Gly Val Met Tyr Ile Val Phe Pro Ala
                    150
<210> 2648
<211> 161
<212> PRT
<213> Unknown (4877304-dir-0-6 conceptual translation of range 2-484)
<400>2648
Leu Ala Ile Cys Tyr Pro Leu His Tyr Ser Ala Leu Met Thr Asn Lys
                 5
```

```
His Ala Ile Arg Leu Ser Cys Leu Cys Trp Ile Ile Gly Phe Leu Ile
                               25
            20
Leu Ile Met Asn Leu Cys Phe Ile Arg Gln Thr Leu Phe Cys Gly Pro
                            40
Asn Glu Val Pro His Tyr Phe Cys Asp Tyr Ser Ala Val Ala Ala Leu
                        55
Ala Cys Asn Asp Ile Ser Ile Tyr Ala Ala Val Gly Phe Ala Ile Ala
                    70
                                        75
Met Cys Val Ile Cys Ser Val Leu Leu Cys Leu Val Tyr Ser Tyr Val
                                    90
                85
Lys Ile Val Ala Ser Val Leu Lys Ile Ala Ser Thr Asp Gly Arg Gln
                                105
Lys Ala Phe Ser Thr Cys Val Ser His Leu Phe Val Val Ser Val Phe
                            120
Ser Ile Leu Ala Ala Phe Val Phe Val Ser Tyr Arg Ile Glu Glu Phe
                       135
                                           140
Ser Glu Asp Ala Arg Met Ile Ile His Val Val Gln Asn Thr Phe Pro
                    150
                                       155
Ser
<210> 2649
<211> 168
<212> PRT
<213> Unknown (5262456-dir-284-6 conceptual translation of range 28407-28908)
<220>
<221> VARIANT
<222> (1)...(168)
<223> Xaa = Any Amino Acid
<400>2649
Gly Phe Trp Leu Gly Cys Tyr Leu Trp Phe Met Val Val Leu Thr Leu
                5
                                    10
Ala Ile Arg Leu Arg Pro Phe Gly Leu Gly Gly Phe Leu Leu Lys Xaa
                                25
Thr Ile Glu Xaa Gly Ala Cys Pro Arg Xaa Val Met Leu Leu Cys
                            40
Gln Lys Pro Tyr Leu His Cys Val Val Val Val Phe Ile Phe Leu
                        55
                                            60
Ala Ser Leu Leu Ile Leu Val Ser Tyr Gly Phe Ile Ala Val Ala
                    70
                                       75
Val Leu Lys Ile Lys Ser Ala Ala Gly Arg Gln Lys Ala Phe Gly Thr
                                    90
                85
Cys Phe Ser His Leu Ile Val Val Ser Ile Phe Tyr Gly Thr Val Arg
                                105
                                                    110
            100
Tyr Met Tyr Ile Glu Pro Gly Asn Ser Pro Ser Gln Asp Glu Gly Lys
                            120
                                                125
Leu Leu His Ile Phe Tyr Ser Ile Val Thr Pro Thr Leu Asn Pro Tyr
                        135
                                            140
Pro Leu Arg Asn Lys Glu Phe Lys Trp Ala Met Lys Arg Leu Ile Gly
                   150
                                       155
                                                            160
Lys Glu Lys Gly Ser Gly Asp Thr
                165
<210> 2650
<211> 312
<213> Unknown (3941546-dir-0-12 conceptual translation of range 37-972)
```

<400>2650

```
Asn Val Ser Phe Tyr Asn Phe Lys Cys Thr Leu Ser Glu Leu Thr Gln
                                    10
Pro Gln Arg Val Val Leu Ile Trp Val Phe Thr Ile Ile Ile Thr Ile
                                25
Thr Val Val Gly Asn Ile Leu Thr Ile Val Ser Ile Leu Tyr Phe Arg
                            40
Gln Leu Gln Thr Arg Thr Asn Val Leu Ala Leu Ser Leu Ala Leu Ala
                       55
                                            60
Asp Phe Leu Val Gly Cys Leu Ile Met Pro Phe Ser Val Met Arg Thr
                                       75
                    70
Ala Tyr Ser Cys Trp Phe Tyr Gly Gln Leu Met Cys Arg Ile His Thr
               85
Trp Leu Asp Tyr Thr Phe Thr Thr Cys Ser Ile Phe Asn Leu Ala Cys
                                105
           100
Ile Ser Ile Asp Arg Tyr Val Ala Ile Ser Asp Pro Leu Arg Tyr Asp
                                               125
                           120
Gln Arg Val Thr Tyr Arg Ile Leu Ala Val Met Leu Thr Ile Cys Trp
                       135
Gly Asn Ile Ile Pro Tyr Gly Val Ser Tyr Met Leu Lys Leu Asn Ile
                                       155
                  150
Asn Gly Ile Glu Ser Val Val Ala Ala Lys Ser Cys Pro Asp Asn Cys
                                                       175
               165
                                   170
Ser Val Phe Met Asn Val Pro Phe Gly Leu Ala Asn Ser Met Gly Ala
                               185
           180
Tyr Val Leu Pro Met Leu Phe Ile Met Ala Ala Tyr Ser Arg Ile Tyr
                                               205
                           200
Val Met Ala Arg Asn Gln Ala Lys Arg Ile Ser Ser Leu Gly Asp Gln
                        215
                                            220
Val Arg Ala Ser Asn Ala Ser Asp Leu Thr Met Gln Ser Lys Trp Asn
                   230
                                       235
Ala Met Lys Arg Asp His Asn Ala Thr Lys Thr Leu Gly Met Ile Met
                                    250
Val Val Leu Phe Ile Val Trp Leu Pro Phe Ile Val Val Val Ala Thr
                                                   270
                               265
Glu Pro Val Ile Gly Tyr Arg Met Asp Ser Thr Val Trp Asp Val Ala
                           280
                                               285
Asn Trp Phe Thr Tyr Phe Asn Ser Arg Met Asn Pro Ile Leu Phe Ala
                                            300
                       295
Ser Phe Asn Asn Ser Phe Arg Ser
                   310
<210> 2651
<211> 314
<213> Unknown (17-2 (HGMP07I 400671 OL1A 438389 P30953 OLFI 1804351A S20572)
Parmentier-M 92)
<400>2651
Met Met Gly Gln Asn Gln Thr Ser Ile Ser Asp Phe Leu Leu Gly
Leu Pro Ile Gln Pro Glu Gln Gln Asn Leu Cys Tyr Ala Leu Phe Leu
                                25
Ala Met Tyr Leu Thr Thr Leu Leu Gly Asn Leu Leu Ile Ile Val Leu
                                                45
        35
                            40
Ile Arg Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser
                        55
Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Ile Pro Lys
                                        75
Leu Leu Gln Asn Met Gln Asn Gln Asp Pro Ser Ile Pro Tyr Ala Asp
                                    90
Cys Leu Thr Gln Met Tyr Phe Phe Leu Leu Phe Gly Asp Leu Glu Ser
```

```
105
           100
Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
                          120
Pro Leu His Tyr Thr Ala Ile Met Ser Pro Met Leu Cys Leu Ala Leu
                      135
                                           140
Val Ala Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His Thr
                   150
                                       155
Leu Leu Met Ala Arg Leu Cys Phe Cys Ala Asp Asn Val Ile Pro His
                                   170
              165
Phe Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ala Phe Ser Asp Thr
           180
                              185
Arg Val Asn Glu Trp Val Ile Phe Ile Met Gly Gly Leu Ile Leu Val
                           200
                                               205
Ile Pro Phe Leu Leu Ile Leu Gly Ser Tyr Ala Arg Ile Val Ser Ser
                       215
                                           220
Ile Leu Lys Val Pro Ser Ser Lys Gly Ile Cys Lys Ala Phe Ser Thr
                   230
                                       235
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Val Ile
                                  250
              245
Gly Leu Tyr Leu Cys Ser Ser Ala Asn Ser Ser Thr Leu Lys Asp Thr
           260
                               265
Val Met Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                           280
Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Gly Ala Leu Ser Arg Val
                      295
Ile His Gln Lys Lys Thr Phe Phe Ser Leu
                   310
<210> 2652
<211> 312
<212> PRT
<213> Unknown (17-4 (OLFR1 425221 482560 A48413 HSHGM07EG) Schurmans-S 93)
<400>2652
Met Asp Gly Gly Asn Gln Ser Glu Gly Ser Glu Phe Leu Leu Gly
Met Ser Glu Ser Pro Glu Gln Gln Gln Ile Leu Phe Trp Met Phe Leu
                               25
Ser Met Tyr Leu Val Thr Val Val Gly Asn Val Leu Ile Ile Leu Ala
                           40
                                               45
Ile Ser Ser Asp Ser Arg Leu His Thr Pro Val Tyr Phe Phe Leu Ala
                       55
Asn Leu Ser Phe Thr Asp Leu Phe Phe Val Thr Asn Thr Ile Pro Lys
                                       75
                   70
Met Leu Val Asn Leu Gln Ser His Asn Lys Ala Ile Ser Tyr Ala Gly
                                   90
Cys Leu Thr Gln Leu Tyr Phe Leu Val Ser Leu Val Ala Leu Asp Asn
           100
                               105
Leu Ile Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Cys
                           120
Pro Leu His Tyr Thr Thr Ala Met Ser Pro Lys Leu Cys Ile Leu Leu
                       135
                                           140
Leu Ser Leu Cys Trp Val Leu Ser Val Leu Tyr Gly Leu Ile His Thr
                   150
                                       155
Leu Leu Met Thr Arg Val Thr Phe Cys Gly Ser Arg Lys Ile His Tyr
                                   170
               165
Ile Phe Cys Glu Met Tyr Val Leu Leu Arg Met Ala Cys Ser Asn Ile
                               185
           180
Gln Ile Asn His Thr Val Leu Ile Ala Thr Gly Cys Phe Ile Phe Leu
                           200
Ile Pro Phe Gly Phe Val Ile Ile Ser Tyr Val Leu Ile Ile Arg Ala
```

```
215
                                           220
Ile Leu Arg Ile Pro Ser Val Ser Lys Lys Tyr Lys Ala Phe Ser Thr
                                      235
                230
Cys Ala Ser His Leu Gly Ala Val Ser Leu Phe Tyr Gly Thr Leu Cys
                                  250
              245
Met Val Tyr Leu Lys Pro Leu His Thr Tyr Ser Val Lys Asp Ser Val
                                                   270
                               265
          260
Ala Thr Val Met Tyr Ala Val Val Thr Pro Met Met Asn Pro Phe Ile
                          280
Tyr Ser Leu Arg Asn Lys Asp Met His Gly Ala Leu Gly Arg Leu Leu
                      295
Asp Lys His Phe Lys Arg Leu Thr
<210> 2653
<211> 315
<212> PRT
<213> Unknown (17-40 (OL1E 516320 2209308A 1588713))
<400>2653
Met Gln Pro Glu Ser Gly Ala Asn Gly Thr Val Ile Ala Glu Phe Ile
                                   10
Leu Leu Gly Leu Leu Glu Ala Pro Gly Leu Gln Pro Val Val Phe Val
                               25
Leu Phe Leu Phe Ala Tyr Leu Val Thr Val Arg Gly Asn Leu Ser Ile
                      40
Leu Ala Ala Val Leu Val Glu Pro Lys Leu His Thr Pro Met Tyr Phe
                       55
Phe Leu Gly Asn Leu Ser Val Leu Asp Val Gly Cys Ile Ser Val Thr
                                       75
                   70
Val Pro Ser Met Leu Ser Arg Leu Leu Ser Arg Lys Arg Ala Val Pro
                                   90
Cys Gly Ala Cys Leu Thr Gln Leu Phe Phe Phe His Leu Phe Val Gly
                               105
           100
Val Asp Cys Phe Leu Leu Thr Ala Met Ala Tyr Asp Gln Phe Leu Ala
                          120
                                               125
Ile Cys Arg Pro Leu Thr Tyr Ser Thr Arg Met Ser Gln Thr Val Gln
                                          140
                      135
Arg Met Leu Val Ala Ala Ser Trp Ala Cys Ala Phe Thr Asn Ala Leu
                  150
                                       155
Thr His Thr Val Ala Met Ser Thr Leu Asn Phe Cys Gly Pro Asn Val
                                   170
               165
Ile Asn His Phe Tyr Cys Asp Leu Pro Gln Leu Phe Gln Leu Ser Cys
           180
                               185
Ser Ser Thr Gln Leu Asn Glu Leu Leu Leu Phe Ala Val Gly Phe Ile
                           200
Met Ala Gly Thr Pro Met Ala Leu Ile Val Ile Ser Tyr Ile His Val
                                           220
                      215
Ala Ala Ala Val Leu Arg Ile Arg Ser Val Glu Gly Arg Lys Lys Ala
                                       235
                  230
Phe Ser Thr Cys Gly Ser His Leu Thr Val Val Ala Ile Phe Tyr Gly
                                  250
Ser Gly Ile Phe Asn Tyr Met Arg Leu Gly Ser Thr Lys Leu Ser Asp
           260
                              265
Lys Asp Lys Ala Val Gly Ile Phe Asn Thr Val Ile Asn Pro Met Leu
                           280
Asn Pro Ile Ile Tyr Ser Phe Arg Asn Pro Asp Val Gln Ser Ala Ile
                      295
Trp Arg Met Leu Thr Gly Arg Arg Ser Leu Ala
```

310

```
<210> 2654
<211> 323
<212> PRT
<213> Unknown (17-93)
<400>2654
Met Met Gly Gln Asn Gln Thr Ser Ile Ser Asp Phe Leu Leu Gly
 1
                                    10
Leu Pro Ile Gln Pro Glu Gln Gln Asn Leu Cys Tyr Ala Leu Phe Leu
            20
                                25
                                                    30
Ala Met Tyr Leu Thr Thr Leu Leu Gly Asn Leu Leu Ile Ile Val Leu
                            40
Ile Arg Leu Asp Ser His Leu His Thr Pro Val Tyr Leu Phe Leu Ser
                        55
                                           60
Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys
                    70
                                        75
Leu Leu Gln Asn Met Gln Asn Gln Asp Pro Ser Ile Pro Tyr Ala Asp
               85
                                    90
Cys Leu Thr Gln Met Tyr Phe Phe Leu Tyr Phe Ser Asp Leu Glu Ser
            100
                                105
                                                    110
Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
                            120
                                                125
Pro Met His Tyr Thr Ala Ile Cys Phe Leu Leu His Tyr Thr Ala Ile
                       135
                                           140
Met Ser Pro Met Leu Cys Leu Ser Val Val Ala Leu Ser Trp Val Leu
                   150
                                        155
Thr Thr Phe His Ala Met Leu His Thr Leu Leu Met Ala Arg Leu Cys
               165
                                   170
Phe Cys Ala Asp Asn Val Ile Pro His Phe Phe Cys Asp Met Ser Ala
                                                   190
          180
                               185
Leu Leu Lys Leu Ala Cys Ser Asp Thr Arg Val Asn Glu Trp Val Ile
        195
                            200
Phe Ile Met Gly Gly Leu Ile Leu Val Ile Pro Phe Leu Leu Ile Leu
                        215
                                            220
Gly Ser Tyr Ala Arg Ile Val Ser Ser Ile Leu Lys Val Pro Ser Ser
                   230
                                        235
Lys Gly Ile Cys Lys Ala Phe Ser Thr Cys Gly Ser His Leu Ser Val
                245
                                    250
Val Ser Leu Phe Tyr Gly Thr Val Ile Gly Leu Tyr Leu Cys Pro Ser
                               265
                                                    270
Ala Asn Ser Ser Thr Leu Lys Asp Thr Val Met Ala Met Met Tyr Thr
                           280
                                              285
Val Val Thr Pro Met Leu Thr Pro Phe Ile Tyr Ser Leu Arg Asn Arg
                       295
                                           300
Asp Met Lys Gly Ala Leu Glu Arg Val Ile Cys Lys Arg Lys Asn Pro
305
                    310
                                        315
                                            ....
Phe Leu Leu
<210> 2655
<211> 316
<213> Unknown (FAT11 (HUMORLMHC A57069 601919 1097174 1362875) Fan-W 95)
<400>2655
Met Asp Asn Gln Ser Ser Thr Pro Gly Phe Leu Leu Gly Phe Ser
               5
                                   10
Glu His Pro Gly Leu Gly Arg Thr Leu Phe Val Asp Val Ile Thr Ser
            20
                               25
Tyr Leu Leu Thr Leu Val Gly Asn Thr Leu Ile Ile Leu Leu Ser Ala
                            40
```

Leu Asp Thr Lys Leu His Ser Pro Met Tyr Phe Phe Leu Ser Asn Leu

Ser Phe Leu Asp Leu Cys Phe Thr Thr Ser Cys Val Pro Gln Met Leu 70 Ala Asn Leu Trp Gly Pro Lys Lys Thr Ile Ser Phe Leu Asp Cys Ser 85 90 Val Gln Ile Phe Ile Phe Leu Ser Leu Gly Thr Thr Glu Cys Ile Leu 100 105 110 Met Lys Val Met Ala Phe Asp Arg Tyr Val Ala Val Cys Gln Pro Leu 120 125 His Tyr Ala Thr Ile Ile His Pro Arg Leu Cys Trp Gln Leu Ala Ser 135 140 Val Ala Trp Val Ile Gly Leu Val Gly Ser Val Val Gln Thr Pro Ser 150 155 Thr Leu His Leu Pro Phe Cys Pro Asp Arg Gln Val Asp Asp Phe Val 165 170 Cys Glu Val Pro Ala Leu Ile Arg Leu Ser Cys Glu Asp Thr Ser Tyr 185 180 Asn Glu Ile Gln Val Ala Val Ala Ser Val Phe Ile Leu Val Val Pro 200 205 Leu Ser Leu Ile Leu Val Ser Tyr Gly Ala Ile Thr Trp Ala Val Leu 215 220 Arg Ile Asn Ser Ala Thr Ala Trp Arg Lys Ala Phe Gly Thr Cys Ser 230 235 Ser His Leu Thr Val Val Thr Leu Phe Tyr Ser Ser Val Ile Ala Val 250 245 Tyr Leu Gln Pro Lys Asn Pro Tyr Ala Gln Gly Arg Gly Lys Phe Phe 260 265 270 Gly Leu Phe Tyr Ala Val Gly Thr Pro Ser Leu Asn Pro Leu Val Tyr 280 285 Thr Leu Arg Asn Lys Glu Ile Lys Arg Ala Leu Arg Arg Leu Leu Gly 295 300 Lys Glu Arg Asp Ser Arg Glu Ser Trp Arg Ala Ala 310 <210> 2656 <211> 254 <212> PRT <213> Unknown (H8 (432510) Selbie-LA 92) <400>2656 Pro Met Tyr Leu Phe Leu Ser Asn Leu Ser Phe Leu Asp Ile Gly Phe 10 Ile Ser Thr Ile Ile Pro Lys Met Leu Asp His Ile Ser Ser Gly Ile 25 Lys Leu Ile Ser Tyr Gly Glu Cys Leu Thr Gln Leu Tyr Phe Ser Gly 40 45 Leu Phe Ala Asp Leu Asp Asn Asn Phe Leu Leu Ala Val Met Ala Ile 55 60 Asp Arg Tyr Val Ala Ile Ser His Pro Leu His Tyr Ala Leu Thr Met 75 Asn Ser Gln Arg Cys Val Leu Leu Val Ala Val Ser Trp Val Ile Thr 85 Ile Leu His Ala Leu Val His Thr Leu Leu Val Thr Arg Leu Ser Phe 105 Cys Gly Pro Asn Ile Ile Pro His Phe Phe Cys Asp Leu Val Pro Leu 115 120 125 Leu Lys Leu Ala Cys Ser Ser Thr Cys Val Asn Asp Leu Val Leu Ile 135 140

155

Leu Val Pro Gly Thr Leu Leu Ile Ala Pro Phe Val Cys Ile Leu Met

```
Ser Tyr Phe Tyr Ile Ala Leu Ala Ile Leu Arg Ile Asp Ser Pro Arg
                165
                                     170
Gly Lys Gln Arg Ala Phe Ser Ser Cys Thr Ser His Leu Ser Val Val
                                 185
Ser Leu Phe Tyr Ser Thr Ala Ile Gly Val Tyr Leu Cys Pro Pro Ser
                            200
Ser His Ser Asp Gly Lys Asp Arg Val Phe Ser Val Met Tyr Thr Val
                        215
Val Thr Pro Met Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn Arg Asp
                    230
                                        235
Met Lys Gly Ala Leu Gly Lys Leu Leu Gly Ile Lys Thr Ser
                245
<210> 2657
<211> 195
<212> PRT
<213> Unknown (G3 (432509) Selbie-LA 92)
Glu Phe Leu Leu Gly Leu Ser Glu Asp Pro Asp Leu Gln Pro Val
                                    10
Leu Ala Leu Leu Ser Leu Ser Leu Ser Met Tyr Leu Val Met Val Leu
                                25
Arg Asn Leu Leu Ser Ile Leu Ala Val Ser Ser Asp Ser Pro Leu His
                            40
Thr Pro Met Tyr Phe Phe Leu Ser Asn Leu Cys Trp Pro Asp Ile Gly
                        55
                                            60
Phe Thr Ser Ala Met Val Pro Lys Met Ile Val Asp Thr Gln Ser His
                    70
                                        75
Ser Arg Val Ile Ser His Ala Gly Cys Leu Thr Gln Met Ser Phe Leu
                                    90
Leu Leu Val Ala Cys Ile Glu Gly Met Leu Leu Thr Val Met Ala Tyr
                                105
Asp Cys Phe Val Ala Ile Cys Arg Pro Leu His Tyr Pro Ile Ile Val
        115
                            120
                                                125
Asn Pro His Leu Cys Val Phe Phe Val Leu Val Ser Phe Phe Leu Ser
                        135
                                            140
Leu Leu Asp Ser Gln Leu His Ser Trp Ile Val Leu Gln Leu Thr Ile
                    150
                                        155
Ile Lys Asn Val Glu Ile Ser Asn Leu Val Cys Asp Pro Ser Gln Leu
                                    170
Leu Lys Leu Ala Cys Ser Asp Ser Val Leu Thr Asn Ile Phe Ile Tyr
Ser Ile Gly
       195
<210> 2658
<211> 314
<212> PRT
<213> Unknown (HsOLF1 (1336041 HSU56420) Issel-Tarver-L 97 11q11)
<400>2658
Met Glu Phe Thr Asp Arg Asn Tyr Thr Leu Val Thr Glu Phe Ile Leu
Leu Gly Phe Pro Thr Arg Pro Glu Leu Gln Ile Val Leu Phe Leu Met
                                25
Phe Leu Thr Leu Tyr Ala Ile Ile Leu Ile Gly Asn Ile Gly Leu Met
Leu Leu Ile Arg Ile Asp Pro His Leu Gln Thr Pro Met Tyr Phe Phe
                        55
Leu Ser Asn Leu Ser Phe Val Asp Leu Cys Tyr Phe Ser Asp Ile Val
```

```
70
                                       75
Pro Lys Met Leu Val Asn Phe Leu Ser Glu Asn Lys Ser Ile Ser Tyr
               85
                                   90
Tyr Gly Cys Ala Leu Gln Phe Tyr Phe Phe Cys Thr Phe Ala Asp Thr
           100
                               105
Glu Ser Phe Ile Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile
                                               125
                           120
Cys Asn Pro Leu Leu Tyr Thr Val Val Met Ser Arg Gly Ile Cys Met
                       135
                                           140
Arg Leu Ile Val Leu Ser Tyr Leu Gly Gly Asn Met Ser Ser Leu Val
                                       155
                   150
His Thr Ser Phe Ala Phe Ile Leu Lys Tyr Cys Asp Lys Asn Val Ile
              165
                                   170
Asn His Phe Phe Cys Asp Leu Pro Pro Leu Leu Lys Leu Ser Cys Thr
                               185
                                                   190
Asp Thr Thr Ile Asn Glu Trp Leu Leu Ser Thr Tyr Gly Ser Ser Val
                                               205
                          200
Glu Ile Ile Cys Phe Ile Ile Ile Ile Ser Tyr Phe Phe Ile Leu
                                           220
                       215
Leu Ser Val Leu Lys Ile Arg Ser Phe Ser Gly Arg Lys Lys Thr Phe
                                        235
                   230
Ser Thr Cys Ala Ser His Leu Thr Ser Val Thr Ile Tyr Gln Gly Thr
                                   250
Leu Leu Phe Ile Tyr Ser Arg Pro Ser Tyr Leu Tyr Ser Pro Asn Thr
                               265
           260
Asp Lys Ile Ile Ser Val Phe Tyr Thr Ile Phe Ile Pro Val Leu Asn
                                               285
       275
                           280
Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Asp Ala Ala Glu
                       295
Lys Val Leu Arg Ser Lys Val Asp Ser Ser
<210> 2659
<211> 317
<212> PRT
<213> Unknown (HsOLF3 (1336043 HSU56421) Issel-Tarver-L 97 7g35)
<400>2659
Met Gly Thr Asp Asn Gln Thr Trp Val Ser Glu Phe Ile Leu Leu Gly
                                   10
Leu Ser Ser Asp Trp Asp Thr Arg Val Ser Leu Phe Val Leu Phe Leu
                               25
           20
Val Met Tyr Val Val Thr Val Leu Gly Asn Cys Leu Ile Val Leu Leu
                           40
       35
Ile Arg Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Thr
                       55
                                           60
Asn Leu Ser Leu Val Asp Val Ser Tyr Ala Thr Ser Val Val Pro Gln
                                       75
                   70
                        . .
Leu Leu Ala His Phe Leu Ala Glu His Lys Ala Ile Pro Phe Gln Ser
               85
                                   90
Cys Ala Ala Gln Leu Phe Phe Ser Leu Ala Leu Gly Gly Ile Glu Phe
                               105
Val Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Val Cys Asp
                                               125
                           120
Ala Leu Arg Tyr Ser Ala Ile Met His Gly Gly Leu Cys Ala Arg Leu
                                           140
                       135
Ala Ile Thr Ser Trp Val Ser Gly Phe Ile Ser Ser Pro Val Gln Thr
                  150
                                       155
Ala Ile Thr Phe Gln Leu Pro Met Cys Arg Asn Lys Phe Ile Asp His
               165
                                  170
Ile Ser Cys Glu Leu Leu Ala Val Val Arg Leu Ala Cys Val Asp Thr
```

```
185
Ser Ser Asn Glu Val Thr Ile Met Val Ser Ser Ile Val Leu Leu Met
                                                205
                            200
Thr Pro Leu Cys Leu Val Leu Leu Ser Tyr Ile Gln Ile Ile Ser Thr
                                            220
                       215
Ile Leu Lys Ile Gln Ser Arg Glu Gly Arg Lys Lys Ala Phe His Thr
                                       235
                   230
Cys Ala Ser His Leu Thr Val Val Ala Leu Cys Tyr Gly Val Ala Ile
                                   250
                245
Phe Thr Tyr Ile Gln Pro His Ser Ser Pro Ser Val Leu Gln Glu Lys
                               265
            260
Leu Phe Ser Val Phe Tyr Ala Ile Leu Thr Pro Met Leu Asn Pro Met
                                                285
                           280
       275
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Gly Ala Trp Gln Lys Leu
                                            300
                      295
Leu Trp Lys Phe Ser Gly Leu Thr Ser Lys Leu Ala Thr
                   310
<210> 2660
<211> 312
<212> PRT
<213> Unknown (OLFMF gi 2370145 | gnl | PID | e334200 olfactory receptor protein)
<400>2660
Met Ser Gly Thr Asn Gln Ser Ser Val Ser Glu Phe Leu Leu Gly
                                   10
           5
Leu Ser Arg Gln Pro Gln Gln Gln His Leu Leu Phe Val Phe Phe Leu
            20
Ser Met Tyr Leu Ala Thr Val Leu Gly Asn Leu Leu Ile Ile Leu Ser
                                                45
Val Ser Ile Asp Ser Cys Leu His Thr Pro Met Tyr Phe Phe Leu Ser
Asn Leu Ser Phe Val Asp Ile Cys Phe Ser Phe Thr Thr Val Pro Lys
                    70
                                        75
Met Leu Ala Asn His Ile Leu Glu Thr Gln Thr Ile Ser Phe Cys Gly
                                    90
Cys Leu Thr Gln Met Tyr Phe Val Phe Met Phe Val Asp Met Asp Asn
                               105
Phe Leu Leu Ala Val Met Ala Tyr Asp His Phe Val Ala Val Cys His
                                                125
                            120
Pro Leu His Tyr Thr Ala Lys Met Thr His Gln Leu Cys Ala Leu Leu
                        135
                                            140
Val Ala Gly Leu Trp Val Val Ala Asn Leu Asn Val Leu Leu His Thr
                                        155
                    150
Leu Leu Met Ala Pro Leu Ser Phe Cys Ala Asp Asn Ala Ile Thr His
                                    170
                165
Phe Phe Cys Asp Val Thr Pro Leu Leu Lys Leu Ser Cys Ser Asn Thr
                                185
            180
His Leu Asn Glu Val Ile Ile Leu Ser Glu Gly Ala Leu Val Met Ile
                            200
Thr Pro Phe Leu Cys Ile Leu Ala Ser Tyr Met His Ile Thr Cys Thr
                                            220
                        215
Val Leu Lys Val Pro Ser Thr Lys Gly Arg Trp Lys Ala Phe Ser Thr
                                        235
                    230
Cys Gly Ser His Leu Ala Val Val Leu Leu Phe Tyr Ser Thr Ile Ile
                                    250
                245
Ala Val Tyr Phe Asn Pro Leu Ser Ser His Ser Ala Glu Lys Asp Thr
                                265
            260
Met Ala Thr Val Leu Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                            280
Ile Tyr Ser Leu Arg Asn Arg Tyr Leu Lys Gly Ala Leu Lys Lys Val
```

```
300
                       295
Ile Gly Arg Val Val Phe Ser Val
<210> 2661
<211> 315
<212> PRT
<213> Unknown (OLFMF2 gi|2808536|emb|AJ003145|HSAJ03145 Homo sapiens mRNA for
<400>2661
Val Gln Thr Tyr Glu Arg Asp Lys Pro Val Ser Val Ser Glu Phe Leu
                                    10
Leu Leu Gly Leu Ser Arg Gln Pro Gln Gln His Leu Leu Phe Val
            20
                                25
Phe Phe Leu Ser Met Tyr Leu Ala Thr Val Leu Gly Asn Leu Leu Ile
                           40
       35
Ile Leu Ala Ile Ser Ile Asp Ser Arg Leu His Thr Pro Met Tyr Phe
                                            60
                       55
Phe Leu Ser Asn Met Ser Phe Val Asp Asn Cys Phe Ser Thr Thr Val
                                       75
                   70
Pro Lys Met Leu Ala Asn His Ile Leu Arg Thr Gln Thr Ile Ser Phe
                                   90
              85
Ser Gly Cys Leu Met Gln Met Tyr Phe Ile Ser Glu Leu Ala Asp Met
                                105
                                                    110
           100
Asp Asn Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala Val
                                                125
                           120
Cys Arg Pro Leu His Tyr Thr Ala Lys Met Ile His Gln Leu Cys Ala
                                            140
                       135
Leu Leu Val Thr Gly Ser Trp Val Val Ala Asn Ser Asn Ala Leu Leu
                                        155
                   150
His Thr Leu Leu Met Ala Arg Leu Ser Phe Cys Ala Asp Asn Thr Ile
                                   170
Pro His Ile Phe Cys Asp Val Thr Pro Leu Leu Lys Leu Ser Cys Ser
                                                   190
                               185
           180
Asp Thr His Leu Ser Glu Val Met Ile Leu Thr Glu Ala Ala Leu Val
                                                205
       195
                           200
Thr Ile Thr Pro Phe Leu Cys Leu Leu Ala Ser Tyr Met His Ile Thr
                                            220
                       215
Cys Val Val Leu Arg Val Pro Ser Thr Lys Gly Arg Trp Lys Ala Phe
                   230
                                       235
Ser Thr Cys Gly Ser His Leu Ala Val Val Leu Leu Phe Tyr Gly Thr
                                                       255
                                   250
               245
Ile Met Ser Pro Tyr Phe Arg Thr Ser Ser Ser His Ser Ala Gln Arg
                               265
Asp Ile Ala Ala Ala Val Arg Phe Thr Val Val Thr Pro Val Met Asn
                           280
Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Ile Lys Gly Ala Leu Val
                       295
Lys Val Val Ala Val Lys Phe Phe Ser Val Gln
                   310
<210> 2662
<211> 313
<212> PRT
<213> Unknown (CFDTMT)
Met Thr Glu Lys Asn Gln Thr Val Val Ser Glu Phe Val Leu Leu Gly
                                   10
Leu Pro Ile Asp Pro Asp Gln Arg Asp Leu Phe Tyr Ala Leu Phe Leu
```

```
Ala Met Tyr Val Thr Thr Ile Leu Gly Asn Leu Leu Ile Ile Val Leu
                           40
Ile Gln Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser
                       55
Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys
                                       75
                    70
Leu Leu Gln Asn Met Gln Ser Gln Val Pro Ser Ile Pro Tyr Ala Gly
                                   90
Cys Leu Thr Gln Met Tyr Phe Phe Leu Phe Phe Gly Asp Leu Glu Ser
                               105
           100
Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
                           120
Pro Leu His Tyr Thr Thr Ile Met Ser Pro Lys Leu Cys Phe Ser Leu
                       135
Leu Val Leu Ser Trp Val Leu Thr Met Phe His Ala Val Leu His Thr
                   150
Leu Leu Met Ala Arg Leu Cys Phe Cys Ala Asn Thr Ile Pro His Phe
                                   170
               165
Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp Thr Gln
                               185
Val Asn Glu Leu Val Ile Phe Ile Met Gly Gly Leu Ile Leu Val Ile
                                               205
                           200
Pro Phe Leu Leu Ile Ile Thr Ser Tyr Ala Arg Ile Val Ser Ser Ile
                       215
                                           220
Leu Lys Val Pro Ser Ala Ile Gly Ile Cys Lys Val Phe Ser Thr Cys
                                        235
                   230
Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Val Ile Gly
                                    250
                245
Leu Tyr Leu Cys Pro Ser Ala Asn Asn Ser Thr Val Lys Glu Thr Ile
                                265
Met Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe Ile
                           280
                                                285
Tyr Ser Leu Arg Asn Lys Asp Met Lys Gly Ala Leu Arg Arg Val Ile
                       295
Cys Arg Lys Lys Ile Thr Phe Ser Val
                   310
<210> 2663
<211> 309
<212> PRT
<213> Unknown (CfOLF4 (CFU53682) Issel-Tarver-L 97)
<400>2663
Met Glu Leu Glu Asn Asp Thr Arg Ile Pro Glu Phe Leu Leu Gly
                                   10
Phe Ser Glu Glu Pro Lys Leu Gln Pro Phe Leu Phe Gly Leu Phe Leu
                                25
Ser Met Tyr Leu Val Thr Ile Leu Gly Asn Leu Leu Leu Ile Leu Ala
                            40
Val Ser Ser Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ala
Asn Leu Ser Phe Val Asp Ile Cys Phe Thr Cys Thr Thr Ile Pro Lys
Met Leu Val Asn Ile Gln Thr Gln Arg Lys Val Ile Thr Tyr Glu Ser
                                    90
Cys Ile Ile Gln Met Tyr Phe Phe Glu Leu Phe Ala Gly Ile Asp Asn
                               105
Phe Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Met Ala Ile Cys Tyr
                           120
Pro Leu His Tyr Met Val Ile Met Asn Pro Gln Leu Cys Ser Leu Leu
```

```
130
                        135
                                            140
Leu Leu Val Ser Trp Ile Met Ser Ala Leu His Ser Leu Leu Gln Thr
                   150
                                       155
Leu Met Val Leu Arg Leu Ser Phe Cys Thr His Phe Gln Ile Pro His
               165
                                    170
Phe Phe Cys Glu Leu Asn Gln Met Ile Gln Leu Ala Cys Ser Asp Thr
                                185
Phe Leu Asn Asn Met Met Leu Tyr Phe Ala Ala Ile Leu Leu Gly Val
                            200
Ala Pro Leu Val Gly Val Leu Tyr Ser Tyr Phe Lys Ile Val Ser Ser
                       215
                                            220
Ile Arg Gly Ile Ser Ser Ala His Ser Lys Tyr Lys Ala Phe Ser Thr
                    230
                                       235
Cys Ala Ser His Leu Ser Val Val Ser Leu Phe Tyr Cys Thr Ser Leu
                                   250
               245
Gly Val Tyr Leu Ser Ser Ala Ala Pro Gln Ser Thr His Thr Ser Ser
           260
                                265
Val Ala Ser Val Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                           280
Ile Tyr Ser Leu Arg Asn Lys Asp Ile Lys Gly Ala Leu Asn Val Phe
                       295
                                           300
Phe Arg Gly Lys Pro
<210> 2664
<211> 317
<212> PRT
<213> Unknown (CfOLF3 (CFU53681) Issel-Tarver-L 97)
<400>2664
Met Gly Thr Gly Asn Gln Thr Trp Val Arg Glu Phe Val Leu Leu Gly
                5
                                   10
Leu Ser Ser Asp Trp Asp Thr Glu Val Ser Leu Phe Val Leu Phe Leu
                                25
Ile Thr Tyr Met Val Thr Val Leu Gly Asn Phe Leu Ile Ile Leu Leu
                            40
                                                45
Ile Arg Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Thr
                        55
Asn Leu Ser Leu Val Asp Val Ser Tyr Ala Thr Ser Ile Ile Pro Gln
                                       75
Met Leu Ala His Leu Leu Ala Ala His Lys Ala Ile Pro Phe Val Ser
                                    90
Cys Ala Ala Gln Leu Phe Phe Ser Leu Gly Leu Gly Ile Glu Phe
           100
                               105
Val Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Val Cys Asp
                           120
                                               125
Pro Leu Arg Tyr Ser Val Ile Met His Gly Gly Leu Cys Thr Arg Leu
                       135
                                           140
Ala Ile Thr Ser Trp Val Ser Gly Ser Met Asn Ser Leu Met Gln Thr
                   150
Val Ile Thr Phe Gln Leu Pro Met Cys Thr Asn Lys Tyr Ile Asp His
               165
                                   170
Ile Ser Cys Glu Leu Leu Ala Val Val Arg Leu Ala Cys Val Asp Thr
           180
                               185
Ser Ser Asn Glu Ile Ala Ile Met Val Ser Ser Ile Val Leu Leu Met
                           200
                                               205
Thr Pro Phe Cys Leu Val Leu Leu Ser Tyr Ile Gln Ile Ile Ser Thr
                       215
                                           220
Ile Leu Lys Ile Gln Ser Thr Glu Gly Arg Lys Lys Ala Phe His Thr
                   230
Cys Ala Ser His Leu Thr Val Val Leu Cys Tyr Gly Met Ala Ile
```

```
245
                                    250
Phe Thr Tyr Ile Gln Pro Arg Ser Ser Pro Ser Val Leu Gln Glu Lys
            260
                               265
Leu Ile Ser Leu Phe Tyr Ser Val Leu Thr Pro Met Leu Asn Pro Met
                           280
Ile Tyr Ser Val Arg Asn Lys Glu Val Lys Gly Ala Trp Gln Lys Leu
                       295
Leu Gly Gln Leu Thr Gly Ile Thr Ser Lys Leu Ala Thr
                   310
<210> 2665
<211> 311
<212> PRT
<213> Unknown (CfOLF2 (1314663 CFU53680) Issel-Tarver-L 97)
<400>2665
Met Asp Gly Lys Asn Cys Ser Ser Val Asn Glu Phe Leu Leu Val Gly
               5
                                  10
Ile Ser Asn Lys Pro Gly Val Lys Val Thr Leu Phe Ile Thr Phe Leu
         20
                                25
Ile Val Tyr Leu Ile Ile Leu Val Ala Asn Leu Gly Met Ile Ile Leu
        35
                           40
                                                45
Ile Arg Met Asp Ser Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ser
His Leu Ser Phe Ser Asp Ala Arg Tyr Ser Thr Ala Val Gly Pro Arg
                    70
                                        75
Met Leu Val Gly Phe Ile Ala Lys Asn Lys Ser Ile Pro Phe Tyr Ser
                                   90
                                                       95
Cys Ala Met Gln Trp Leu Val Phe Cys Thr Phe Val Asp Ser Glu Cys
           100
                               105
Leu Leu Leu Ala Val Met Ala Phe Asp Arg Tyr Lys Ala Ile Ser His
                           120
                                               125
Pro Leu Leu Tyr Thr Val Ser Met Ser Ser Arg Val Cys Ser Leu Leu
                       135
Met Ala Gly Val Tyr Leu Val Gly Ile Met Asp Ala Ser Val Asn Thr
                   150
                                       155
Ile Leu Thr Phe Arg Leu Cys Phe Cys Glu Ser Asn Val Ile Asn His
               165
                                   170
Phe Phe Cys Asp Val Pro Pro Leu Leu Leu Ser Cys Ser Asp Thr
          180
                               185
Gln Val Asn Glu Leu Val Ile Phe Thr Ile Phe Gly Phe Ile Glu Leu
                           200
                                               205
Ile Thr Leu Ser Gly Leu Phe Val Ser Tyr Cys Tyr Ile Ile Leu Ala
                       215
                                           220
Val Arg Lys Ile Asn Ser Ala Glu Gly Arg Phe Lys Ala Phe Ser Thr
                   230
                                       235
Cys Thr Ser His Leu Thr Ala Val Ala Ile Phe Gln Gly Thr Met Leu
               245
                                   250
Phe Met Tyr Phe Arg Pro Ser Ser Ser Tyr Ser Leu Asp Gln Asp Lys
           260
                               265
Ile Ile Ser Leu Phe Tyr Ser Leu Val Ile Pro Met Leu Asn Pro Leu
                           280
                                               285
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Leu Lys Lys Leu
                       295
Lys Asn Lys Lys Trp Phe His
                   310
<210> 2666
<211> 311
<213> Unknown (CfOLF1 (1314661 CFU53679) Issel-Tarver-L 97)
```

```
<400>2666
Met Asp Gly Asn Tyr Thr Leu Val Thr Glu Phe Ile Leu Leu Gly Phe
            5
                                   10
Pro Thr Arg Pro Glu Leu Gln Ile Val Leu Phe Leu Val Phe Leu Thr
                               25
Leu Tyr Gly Ile Ile Leu Thr Gly Asn Ile Gly Leu Met Met Leu Ile
                          40
                                              45
Arg Thr Asp Pro His Leu Gln Thr Pro Met Tyr Phe Phe Leu Ser Asn
                       55
                                          60
Leu Ser Phe Ala Asp Leu Cys Phe Ser Ser Ala Ile Val Pro Lys Met
                  70
                                      75
Leu Val Asn Phe Leu Ser Glu Asn Lys Ser Ile Ser Leu Tyr Gly Cys
                                  90
               85
Ala Leu Gln Phe Tyr Phe Ser Cys Ala Phe Ala Asp Thr Glu Ser Phe
                              105
Ile Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro
                           120
                                              125
      115
Leu Leu Tyr Thr Val Val Met Ser Arg Gly Ile Cys Val Trp Leu Ile
                       135
                                          140
Val Leu Ser Tyr Ile Gly Gly Asn Met Ser Ser Leu Val His Thr Ser
                                      155
                  150
Phe Ala Phe Ile Leu Lys Tyr Cys Asp Lys Asn Val Ile Asn His Phe
                                  170
              165
Phe Cys Asp Leu Pro Pro Leu Leu Lys Leu Ser Cys Thr Asp Thr Ser
          180
                              185
Val Asn Glu Trp Leu Leu Ser Thr Tyr Gly Ser Ser Val Glu Ile Phe
                          200
                                      205
Cys Phe Ile Val Ile Val Ile Ser Tyr Tyr Phe Ile Leu Arg Ser Val
                                       220
                    215
Leu Arg Ile Arg Ser Ser Ser Gly Arg Lys Thr Phe Ser Thr Cys
                  230
                                       23.5
Ala Ser His Leu Thr Ser Val Ala Ile Tyr Gln Gly Thr Leu Leu Phe
                                   250
Ile Tyr Ser Arg Pro Thr Tyr Leu Tyr Thr Pro Asn Thr Asp Lys Ile
                                                  270
           260
                               265
Ile Ser Val Phe Tyr Thr Ile Ile Pro Val Leu Asn Pro Leu Ile
                          280
                                              285
Tyr Ser Leu Arg Asn Lys Asp Val Lys Asp Ala Ala Lys Arg Ala Val
                      295
Arg Leu Lys Val Asp Ser Ser
<210> 2667
<211> 155
<212> PRT
<213> Unknown (DRU42392)
<400>2667
Asn Pro Leu Arg Tyr Pro Ala Val Met Thr Ser Asn Met Val Val His
                                   10
Leu Ser Ala Ala Ala Trp Gly Val Ala Val Val Leu Val Gly Ile Leu
           20
                               25
Ile Gly Leu Thr Val Arg Leu Ser Phe Cys Arg Ser Val Ile Glu Asn
                          40
Pro Phe Cys Asp Asn Ala Ser Leu Phe Lys Leu Ser Cys Glu Ser Thr
                                          60
Ala Ile Asn Asn Ile Tyr Gly Leu Ser Phe Thr Val Val Leu Leu Thr
                  70
                                   75
Ser Ser Leu Gly Ser Ile Ala Leu Thr Tyr Leu Arg Ile Ala Ile Val
                                  90
```

```
Cys Phe Lys Ser Lys Asn Lys Ala Thr Asn Ser Lys Ala Ile Lys Thr
             100
                                105
 Cys Ser Thr His Leu Ala Val Tyr Leu Ile Met Met Val Ser Gly Leu
                            120
 Thr Thr Ile Thr Leu His Arg Phe Pro Glu Leu Ser Asp Ser Arg Lys
                       135
 Leu Ser Ser Ile Ile Lys His Ile Val Pro Pro
                    150
 <210> 2668
 <211> 155
 <212> PRT
 <213> Unknown (DRU42394)
 <400>2668
 Asn Pro Leu Arg Tyr Gln Thr Ile Met Thr Asn Lys Thr Val Ile Thr
                                     10
Leu Ser Ala Leu Ala Trp Gly Ile Ala Leu Leu Phe Ile Ser Ile Leu
           20
                                25
 Ile Gly Leu Thr Leu Arg Leu Ser Arg Cys Arg Thr Phe Ile Ser Asn
                            40
Pro Phe Cys Asp Asn Ala Ser Leu Phe Lys Leu Ser Cys Glu Asp Val
                        55
                                            60
Thr Ile Asn Asn Leu Tyr Gly Leu Ile Tyr Thr Val Leu Leu Phe Gly
                    70
                                        75
Ser Ser Met Gly Ser Ile Ala Val Thr Tyr Ile Lys Ile Thr Ala Val
                                    90
Cys Leu Val Thr Lys Ser Lys Met Leu Asn Ser Arg Ala Leu Lys Thr
            100
                                105
Cys Ser Thr His Leu Ser Leu Tyr Leu Ile Met Leu Ile Ser Gly Leu
                            120
Ile Ile Ile Val Leu His Arg Phe Pro Ala Tyr Ser Asp Tyr Arg Lys
                        135
Ile Ala Ser Leu Leu Phe His Ile Ile Pro Ser
                    150
<210> 2669
<211> 157
<212> PRT
<213> Unknown (DRU42395)
<400>2669
Leu Pro Leu Arg Tyr His Ala Ile Val Asn Asn Ser Ser Ile Thr Leu
                                    10
Ile Leu Ser Ala Lys Trp Ala Phe Asn Ser Ser Ile Val Ala Leu Met
            20
                                25
Val Ser Leu Ile Thr Arg Ile Ser Phe Cys Asp Ser Asn Val Ile Gln
                            40
                                                45
Ser Tyr Phe Cys Asp His Gly Pro Val Tyr Arg Leu Ala Cys Asn Asp
Asn Ser Ile Asn Arg Phe Met Gly Ser Phe Ile Thr Cys Leu Tyr Leu
Val Val Pro Leu Gly Ile Ile Ile Leu Ser Tyr Ile Gly Ile Phe Leu
Ala Leu Asn Lys Ile Thr Thr Trp Glu Ser Arg Leu Lys Ala Leu Lys
           100
                                105
Thr Cys Val Ser His Leu Leu Leu Val Gly Ile Tyr Phe Leu Pro Met
                            120
                                                125
Ser Cys Thr Tyr Ile Ala Ala Trp Leu Leu Ala Leu Ala Pro Asn Ala
                       135
Arg Val Ile Thr Thr Ser Leu Ala Tyr Thr Ile Ser Gln
```

150

145

```
155
<210> 2670
<211> 150
<212> PRT
<213> Unknown (DRU42396)
<400>2670
Leu Ile Ala Ile Cys Leu Pro Leu Arg Tyr His Val Ile Val Asn Asn
                                   10
Thr Ser Met Ile Ser Ile Phe Ser Ala Val Phe Met Phe Asn Ser Ile
            20
                                25
Ile Val Ala Ser Met Val Ser Leu Val Thr Asn Ile Ser Phe Cys Lys
                            40
Ser Asn Val Ile Gln Ser Tyr Phe Cys Asp His Gly Pro Met Phe Arg
                        55
Met Ala Cys Asn Asp Asn Asn Ile Asn Lys Ile Met Gly Phe Leu Tyr
                    70
                                        75
Thr Thr Leu Tyr Leu Ile Ala Pro Met Leu Val Ile Phe Leu Ser Tyr
                                   90
Leu Gly Ile Phe Leu Val Val Ser Lys Ile Ala Thr Trp Glu Arg Arg
           100
                               105
Leu Lys Ala Leu Lys Thr Cys Val Ser His Leu Leu Leu Val Gly Ile
                           120
Tyr Phe Leu Pro Ile Phe Phe Thr Tyr Leu Thr Ser Leu Leu Phe
               135
Ser Thr Ser Asn Ser Arg
                  150
<210> 2671
<211> 158
<212> PRT
<213> Unknown (DRU42397 (odorant receptor 8; 1644478) Weth-F 96)
Asn Pro Leu Arg Tyr Pro Asn Ile Val Thr Lys Trp Asn Ile Phe Tyr
Leu Cys Leu Ile Ser Trp Val Ile Ala Asn Val Thr Pro Leu Met Met
                               25
Val Ile Arg Ala Tyr Pro Leu Pro Tyr Cys Ala Glu Asn Thr Ile Ile
                           40
Gln Cys Tyr Cys Asp His Ile Ser Ile Thr Ser Leu Ala Cys Thr Asn
                       55
Arg Ala Pro Tyr Ser Ile Pro Ala Phe Val Leu Ala Met Val Ala Leu
                   70
                                        75
Leu Thr Pro Leu Ala Phe Ile Val Phe Ser Tyr Cys Ala Ile Ile Leu
                                    90
Ala Val Leu Arg Ile Ser Ser Thr Gln Ala Arg Leu Lys Thr Phe Ser
           100
                               105
                                                   110
Thr Cys Ser Pro Gln Leu Ile Ile Ile Ala Leu Tyr Phe Leu Pro Arg
                          120
                                               125
Cys Phe Ile Tyr Leu Ser Ser Asn Ile Gly Ile Tyr Phe Ser Thr Asp
                       135
Leu Arg Leu Ala Ile Ile Met Met Tyr Ser Leu Phe Pro Pro
<210> 2672
<211> 155
<212> PRT
<213> Unknown (DRU42398 (1151131))
```

PCT/US00/27582 WO 01/27158

<400>2672 Arg Pro Leu Glu Tyr His Ser Ile Met Thr Asp Gln Arg Ile Ile Glu 10 Cys Ile Leu Phe Cys Trp Leu Thr Pro Phe Phe Cys Met Ala Val Leu 20 25 Ile Gly Leu Thr Ala Arg Leu Thr Leu Cys Gly Ser Ala Ile Glu Lys 40 Leu Tyr Cys Glu Asn Trp Ser Val Val Lys Leu Ser Cys Phe Ser Thr 55 Thr Val Asn Asn Val Val Gly Tyr Val Ile Ile Ile Val Tyr Phe Gly 70 75 His Ala Val Leu Ile Phe Cys Ser Tyr Ile Tyr Leu Val Val Lys Cys 85 90 Arg Lys Ser Thr Glu Ser Arg His Lys Phe Ile Gln Thr Cys Val Pro 100 105 His Leu Leu Ala Leu Leu Asn Val Thr Val Ala Leu Leu Phe Asp Val 120 Leu Tyr Ser Arg Tyr Gly Ser Lys Ser Leu Pro Gln Asp Leu Arg Asn 135 Phe Met Ser Leu Glu Phe Leu Leu Val Pro Pro 150 <210> 2673 <211> 174 <212> PRT <213> Unknown (DRU44439) <400>2673 Met Ala Tyr Asp Arg Leu Ile Ala Ile Cys Trp Pro Leu Arg Tyr Ser 10 Thr Ile Asn Thr Asn Leu Arg Met Leu Leu Ile Ile Ala Leu Ile Trp Ile Leu Val Thr Leu Leu Asp Ile Phe Pro Val Ile Phe Ala Ser Arg 40 Leu Pro Tyr Cys Ser Ser Arg Ala Val Leu Ser Cys Cys Cys Glu His 55 Gly Pro Val Tyr Arg Leu Ala Cys Thr Asp Thr Thr Tyr Asn Arg Gln 70 75 Leu Gly Thr Val Lys Thr Met Ile Thr Leu Leu Gly Pro Leu Phe Phe 90 Ile Val Phe Thr Tyr Val Ile Val Val Ile Ala Val Met Arg Ile Ala 105 Ser Val Thr Gln Arg Trp Lys Ala Phe His Thr Cys Leu Thr His Met 120 125 Met Leu Val Met Leu Tyr Tyr Met Pro Ile Ile Ile Ala Cys Val Leu 135 -140 Gly Asn Leu Arg Leu Val Gln Asn Val Asp Leu Leu Thr Ala Ile Leu 150 155 Thr Arg Ser Val Thr Val Pro Ala Met Leu Asn Pro Ile Ile 165 <210> 2674 <211> 173 <212> PRT <213> Unknown (DRU44440) <400>2674 Leu Ala Tyr Asp Arg Leu Ile Ala Ile Cys Leu Pro Leu Arg Tyr His 10

Ser Ile Val Asn Asn Ser Asn Met Ile Leu Ile Phe Ser Ala Ile Trp 25

20

```
Ala Phe Asn Ser Ser Val Val Ala Leu Met Val Ser Leu Ile Asp Arg
Leu Ser Phe Cys Glu Ser Asn Met Ile Gln Ser Tyr Phe Cys Asp His
                       55
                                           60
Gly Pro Val Tyr Arg Leu Ala Cys Ser Asp Ile Ser Lys Asn Lys Ile
                    70
                                       75
Met Ala Tyr Val Ile Ser Ala Met Tyr Ile Ile Ala Pro Met Val Val
               85
                                   90
Ile Val Phe Ser Tyr Leu Gly Ile Phe Leu Ala Leu Ile Lys Ile Thr
           100
                               105
Thr Trp Glu Gly Arg Leu Lys Ala Leu Lys Thr Cys Val Ser His Leu
                           120
                                               125
Leu Leu Val Gly Ile Phe Phe Leu Pro Leu Phe Cys Thr Tyr Leu Ala
                       135
                                           140
Gln Leu Leu Ser Leu Asn Pro Asn Ala Arg Val Ile Ser Thr Ser
                   150
                                       155
Leu Ser Tyr Ala Ile Pro Pro Met Leu Asn Pro Ile Ile
               165
```

<210> 2675

<211> 173

<212> PRT

<213> Unknown (DRU44441)

## <400>2675

Leu Ala Tyr Asp Arg Leu Ile Ala Ile Cys Leu Pro Leu Arg Tyr His 5 10 Val Ile Val Asn Asn Thr Ser Met Ile Ser Ile Phe Ser Ala Val Phe 25 Met Phe Asn Ser Ile Ile Val Ala Ser Met Val Ser Leu Val Thr Asn 40 Ile Ser Phe Cys Lys Ser Asn Val Ile Gln Ser Tyr Phe Cys Asp His 55 60 Gly Pro Met Phe Arg Met Ala Cys Asn Asp Asn Ile Ile His Glu Ile 75 70 Met Gly Phe Leu Tyr Thr Thr Leu Tyr Leu Ile Ala Pro Met Leu Val 85 90 Ile Phe Leu Ser Tyr Leu Gly Ile Phe Leu Val Val Ser Lys Ile Ala 105 Thr Trp Glu Arg Arg Leu Lys Ala Leu Lys Thr Cys Val Ser His Leu 120 125 Leu Phe Val Gly Ile Tyr Phe Leu Pro Ile Phe Phe Thr Tyr Leu Thr 135 140 Ser Leu Leu Phe Ser Thr Ser Asn Ser Arg Val Ile Ser Thr Ser 150 155 Leu Ala Tyr Ala Ile Pro Pro Met Leu Asn Pro Ile Ile 165 170

<210> 2676

<211> 344

<212> PRT

<213> Unknown (ICTORDA (fish1 L09217 1079242) Ngai-J 93)

## <400>2676

 Met Thr Ser Val Leu Asn Ala Leu Ser Ala Asn Ala Thr Phe Ile Arg

 1
 5

 Pro Ser Thr Phe Tyr Ile Asn Gly Phe Tyr Asn Ile Pro His Thr Lys

 20
 25

 Tyr Tyr Tyr Ala Phe Leu Cys Ile Ala Tyr Ala Val Thr Val Leu Gly

 35
 40

 Asn Ser Phe Ile Met Cys Thr Ile Tyr Leu Ala Arg Ser Leu His Thr

```
50
                         55
Ala Lys Tyr Ile Thr Val Phe Asn Leu Ala Leu Ser Asp Leu Gly Gly
                   70
Ser Ser Ala Leu Ile Pro Lys Leu Ile Asp Thr Phe Leu Phe Glu Asn
                85
                                     90
Gln Val Ile Ser Tyr Glu Ala Cys Leu Ala Asn Met Phe Phe Val Leu
            100
                                105
Phe Phe Met Thr Val Gln Ser Leu Thr Leu Leu Val Met Ala Tyr Asp
                            120
Arg Val Val Ala Ile Cys Phe Pro Leu Arg Tyr Asn Val Ile Val Thr
                        135
                                            140
Lys Glu Ala Met Thr Leu Ile Ile Val Ile Thr Trp Ile Phe Ser Ile
                    150
                                        155
Ser Ile Ile Ala Leu Leu Val Ala Leu Ile Thr Arg Leu Ser Phe Cys
                165
                                    170
Arg Ser Val Ile Ile Asn Ser Tyr Phe Cys Asp His Gly Pro Ile Leu
                                185
Ile Leu Ala Cys Asn Asp Lys Phe Ile Asn Arg Val Met Ala Ile Gly
                            200
                                                205
Cys Phe Val Val Leu Asp Cys Val Pro Phe Leu Leu Ile Ile Val Ser
                        215
                                            220
Tyr Ile Cys Ile Gly Ile Ala Leu Met Asn Ile Ser His Gly Leu Glu
                    230
                                        235
Arg Arg Lys Ala Met Lys Thr Cys Thr Ser His Leu Ile Leu Val Ala
                245
                                    250
Leu Phe Tyr Leu Pro Phe Ile Gly Thr Asn Ile Thr Ser Leu Thr Ser
            260
                                265
Ser Ile Asn Ala Asn Asp Arg Ile Leu Asn Ser Thr Leu Thr Gln Ile
                            280
                                                285
Ile Pro Pro Met Leu Asn Pro Ile Ile Tyr Thr Leu Lys Thr Glu Glu
                       295
                                            300
Val Met Gln Ala Val Lys Val Leu Tyr Lys Arg Ala Lys Ala Val Val
                    310
                                        315
Ile Cys Asp Ile Pro Asn Gly Gln Val Phe Gln Pro Trp Val Gly Val
               325
                                    330
Asp Ser Lys Lys Lys Thr Phe Cys
            340
<210> 2677
<211> 321
<212> PRT
<213> Unknown (ICTORDB (fish3 L09218 1079244) Ngai-J 93)
<400>2677
Met Ala Asp Asn Ile Thr Ser Ile Leu Ser Leu Thr Ser Thr Asn Ala
                                    10
Thr Phe Ile Arg Pro Ser Thr Phe Tyr Ile Thr Gly Leu Tyr Asn Ile
Pro His Ala Lys Tyr Tyr Leu Phe Leu Cys Phe Val Tyr Thr Val
                            40
Thr Phe Leu Gly Asn Ser Phe Ile Met Gly Thr Ile Tyr Leu Ala Arg
                        55
Ser Leu His Thr Ala Lys Tyr Ile Ala Val Phe Asn Leu Ala Leu Ser
                                        75
Asp Leu Cys Gly Ser Ser Ala Leu Ile Pro Lys Leu Leu Asp Met Leu
                                    90
```

Leu Phe Glu Asn Gln Ser Ile Ser Tyr Glu Ala Cys Leu Ser Asn Met 100 105 110 Phe Phe Val Tyr Cys Phe Met Thr Leu Gln Cys Leu Thr Leu Leu Ala 115 120 125 Leu Ala Tyr Asp Arg Leu Ile Ala Ile Cys Tyr Pro Leu Arg Tyr His

```
135
                                           140
Ala Ile Val Thr Lys Ala Ala Met Ile Phe Ile Ile Gly Ala Met Trp
                 150
                                       155
Val Leu Ser Val Ser Val Asn Ala Val Leu Val Ala Leu Ile Thr Arg
                                   170
               165
Leu Ser Phe Cys Arg Ser Thr Thr Val Tyr Ser Tyr Phe Cys Asp His
                               185
           180
Gly Pro Ile Tyr Lys Leu Ala Cys Asn Asp Asn Thr Ile Asn Ser Ile
                           200
                                                205
Met Gly Asn Val Cys Thr Ala Thr Leu Leu Tyr Phe Pro Leu Ile Leu
                       215
                                            220
Ile Ile Ala Ser Tyr Val Cys Ile Gly Phe Ala Leu Gln Lys Ile Ala
                   230
                                       235
His Gly Val Glu Gln Val Lys Ala Met Lys Thr Cys Thr Ser His Leu
               245
                                   250
Ile Leu Val Ala Met Phe Tyr Leu Pro Ile Ile Ser Val Tyr Thr Val
                                                   270
                               265
           260
Ala Leu Thr Thr Arg Ile Asp Thr Asn Ile Arg Ile Ile Asn Thr Ala
                          280
Leu Thr Gln Thr Ile Pro Pro Met Leu Asn Pro Ile Ile Tyr Thr Leu
                       295
                                           300
Lys Thr Glu Glu Val Met Gln Ala Ile Lys Leu Leu Tyr Lys His Ile
                                       315
                  310
Arg
<210> 2678
<211> 328
<212> PRT
<213> Unknown (ICTORDC (fish32A L09219 1079245) Ngai-J 93)
<400>2678
Met Ser Ala Leu Asn Ser Ser Leu Leu Gln Asn Val Ser Phe Val Arg
Pro Glu Tyr Phe Phe Ile Ser Gly Phe Ser Gly Ile Pro Phe Ser Gln
                                25
Tyr Tyr Phe Ala Phe Leu Ile Phe Ile Tyr Ile Ile Ser Leu Cys Gly
                           40
                                               45
Asn Ser Ile Val Leu Phe Met Ile Leu Val Asp Arg Thr Leu His Ile
                       55
Pro Lys Tyr Met Gly Ile Phe Asn Leu Ala Leu Ser Asp Phe Gly Glu
                                        75
                   70
Thr Asn Val Leu Ile Pro Ser Leu Val Lys Thr Leu Phe Phe Asp Ser
                                    90
Gln Tyr Ile Ser Tyr Asp Ala Cys Leu Ala Asn Met Phe Leu Thr Phe
           100
                               105
Phe Phe Ser Ser Gly Gln Ala Leu Thr Leu Val Ala Leu Ala Tyr Asp
                           120
                                               125
Arg Phe Ile Ala Ile Cys Leu Pro Leu Arg Tyr Asn Ala Ile Val Asn
                                           140
                       135
Asn Ser Phe Met Phe Ala Ser Leu Thr Ala Ile Trp Ile Phe Asn Val
                                       155
                   150
Val Met Asn Gly Thr Leu Val Val Leu Ile Thr Arg Leu Ser Phe Cys
                                   170
Lys Thr Asn Glu Ile Lys Ser Phe Phe Cys Asp His Gly Pro Val Tyr
           180
                               185
Thr Ile Ala Cys Asn Asp Asn Ser Ile Asn Ser Phe Met Ala Lys Leu
                           200
                                                205
Cys Thr Ala Val Tyr Leu Tyr Ala Pro Leu Thr Ala Ile Val Phe Ser
                       215
Tyr Leu Gly Ile Leu Leu Ala Leu Thr Lys Ile Thr Thr Trp Glu Ser
```

```
230
 225
                                        235
 Arg Leu Lys Ala Leu Lys Thr Cys Ile Ser His Leu Leu Val Val Gly
                245
                                    250
 Val Phe Phe Leu Pro Ile Val Gly Thr Tyr Leu Ala Ala Val Thr Phe
            260
                                265
 Ser Leu His Pro Asn Ala Arg Ile Ile Asn Thr Ser Leu Ser Arg Thr
                            280
 Ile Pro Pro Met Leu Asn Pro Ile Ile Tyr Val Leu Asn Thr Lys Asp
                        295
                                           300
 Phe Arg Val Phe Ile Val Lys Met Leu Lys Lys Lys Thr Thr Ile Ile
                    310
                                       315
 Ser Gln Val His Ala Leu Ala Lys
<210> 2679
<211> 328
<212> PRT
<213> Unknown (ICTORDD (fish22 fish202 L09220 1079243) Ngai-J 93)
<400>2679
Met Pro Glu Gly Asn Ile Thr Asn Val Lys Asn Phe Val Ile Leu Gly
                5
                                    10
Phe Pro Gly Leu Pro Pro Asn Tyr Tyr Gly Leu Val Ser Val Val Met
            20
                                25
Phe Phe Val Tyr Val Cys Thr Leu Ile Gly Asn Cys Thr Phe Phe Thr
                            40
Leu Phe Leu Arg Glu Lys Ser Leu Gln Lys Pro Met Tyr Tyr Ile Met
Leu Asn Leu Ala Ala Ser Asp Val Leu Phe Ser Thr Thr Thr Leu Pro
                    70
                                       75
Lys Ile Ile Ala Arg Tyr Trp Phe Gly Asp Gly Ser Ile Ser Phe Val
               85
                                    90
Gly Cys Phe Ile Gln Met Gln Phe Val His Tyr Phe Ala Thr Val Asn
           100
                               105
Ala Leu Val Leu Ala Val Met Ala Phe Asp Arg Tyr Val Ala Val Cys
                           120
                                               125
Asn Pro Leu Arg Tyr Val Asn Ile Val Lys Glu Ser Thr Ile Leu Gly
                       135
                                           140
Leu Cys Val Val Ser Trp Leu Leu Ala Glu Pro Thr Val Leu Thr Thr
                   150
                                       155
Val Ile Arg Ala Thr Ser Leu Pro Tyr Cys Ala Ser Asn Thr Val Ile
               165
                                    170
Gln Cys Tyr Cys Asp His Val Ser Val Thr Lys Leu Ala Cys Ile Asp
           180
                                185
Arg Thr Pro Tyr Ala Phe Pro Ala Leu Val Ser Ala Leu Val Met Leu
                           200
                                               205
Leu Thr Pro Leu Ala Phe Ile Leu Phe Ser Tyr Gly Ser Ile Ile Val
                       215
                                           220
Thr Val Phe Arg Thr Ser Ser Thr Arg Gly Arg Leu Lys Thr Leu Ser
                   230
                                       235
Thr Cys Ser Ser Gln Leu Ile Ile Ile Thr Leu Phe Phe Leu Pro Arg
                                   250
Cys Leu Asn Tyr Leu Ser Ser Leu Gly Ile His Ile Asn Ala Asp
           260
                               265
Ile Gln Ile Leu Val Ile Met Leu Tyr Ser Leu Leu Pro Pro Met Ile
                           280
Asn Pro Val Ile Tyr Cys Leu Arg Thr Lys Glu Ala Lys Glu Cys Leu
                      295
                                           300
Lys Arg Ser Leu Asn Arg Ser Ser Phe Val Gln Phe Leu Lys Ile Asn
                   310
                                315
Val Gln Val Ser Thr Leu Ser Asn
```

```
<210> 2680
<211> 317
<212> PRT
<213> Unknown (ICTORDE (fish47 L09221 1079249) Ngai-J 93)
Met Asn Ser Thr Asn Ser Thr Asp Ser Phe Asp Lys Gly Phe Tyr Leu
                                   10
1
Ile Ala Tyr Asn Ser Leu Gly Asn Lys Asn Tyr Leu Ile Leu Ala Leu
                                25
Gly Ile Ile Tyr Leu Ile Thr Leu Leu Cys Asn Phe Thr Leu Leu Ala
                           40
                                               45
Ile Ile Leu Met Asn Ser Ser Leu Gln Asn Pro Lys Phe Leu Ala Val
                                           60
                       55
Phe Asn Leu Ala Val Val Asp Ile Ser Ile Asn Ser Val Ile Ile Pro
                   70
Gln Met Val Pro Val Phe Val Phe Asn Leu Asn His Ile Ser Phe Glu
                                   90
Ser Cys Phe Ser Gln Met Phe Phe Met His Phe Phe Gly Asp Met Glu
                               105
Ser Phe Ser Leu Ala Leu Leu Ala Tyr Asp Arg Leu Ile Ala Ile Cys
                           120
       115
Phe Pro Leu Arg Tyr Pro Thr Ile Asn Thr Asn Met Arg Met Val Leu
                                          140
                       135
Ile Ile Ala Ser Leu Trp Phe Leu Val Phe Leu Ile Glu Leu Tyr Pro
                                       155
                   150
Val Ala Leu Ala Ser Gly Leu Ser Tyr Cys Arg Ser Arg Val Val Pro
                                   170
               165
Ser Cys Cys Cys Glu His Gly Pro Val Tyr Asn Leu Ala Cys Gly Asp
                                                   190
           180
                                185
Ile Ser Tyr Asn Lys Arg Leu Ala Leu Ala Lys Thr Leu Val Val Leu
                           200
                                               205
        195
Leu Gly Pro Leu Thr Phe Ile Ile Cys Ser Tyr Val Ile Val Val
                                           220
                       215
Ala Val Leu Arg Ile Ala Ser Pro Thr Gln Cys Trp Lys Ala Phe Asn
                                       235
                   230
Thr Cys Leu Thr His Met Ile Leu Val Leu Ile Tyr Tyr Leu Pro Ile
               245
                                   250
Ile Leu Ala Tyr Ile Leu Gly Asn Leu Lys Leu Leu Gln Ser Ala Asp
                                                   270
                               265
           260
Leu Tyr Thr Ala Gly Leu Thr Val Cys Val Thr Leu Pro Ala Met Leu
                           280
                                               285
      275
Asn Pro Ile Ile Tyr Ser Leu Lys Thr Glu Glu Leu Gln Asp Lys Leu
                      295
Leu Lys Phe Ile Lys Pro Gln Lys Val Ser Asn Thr Val
                   310
<210> 2681
<211> 313
<213> Unknown (ICTORDF (fish8 L09222 1079250) Ngai-J 93)
<400>2681
Met Leu Ala Pro Val Gln Asn Ile Ser Phe Thr Thr Phe Thr Leu Thr
                                   10
Gly Phe His Asp Leu Gly Glu Trp Gly Pro Ile Leu Ser Ile Pro Tyr
                               25
           20
Leu Leu Met Phe Leu Leu Ser Ser Thr Ser Asn Leu Thr Leu Ile Tyr
                           40
       35
```

```
Leu Ile Ile Ser Gln Arg Ala Leu His Ser Pro Met Cys Ile Leu Ile
                      55
Gly Leu Met Ala Val Val Asp Leu Ser Met Pro Ile Phe Cys Val Pro
                                       75
                    70
Asn Met Leu Ser Phe Leu Phe Asn Trp Lys Gly Ile Ser Leu Val
                                   90
              85
Gly Cys Leu Val Gln Met Phe Cys Ile His Cys Ala Gly Thr Phe Gln
                               105
          100
Ser Thr Ile Leu Leu Trp Met Ala Leu Asp Arg Phe Phe Ala Ile Cys
                           120
                                                125
Arg Pro Leu Tyr Tyr Gln Lys Tyr Met Gly Met Pro Asn Phe Leu Lys
                       135
                                            140
Phe Ile Ile Phe Pro Val Ile Arg Asn Leu Phe Phe Ile Thr Thr Ile
                   150
                                       155
Val Ser Trp Ala Gly Lys Leu Thr Phe Cys Glu Thr Asn Glu Ile Asp
                                   170
His Cys Val Cys Glu His Met Ala Leu Val Gln Leu Ala Cys Gly Asp
                               185
                                                    190
Ile Ser Ile Asn Asn Ala Leu Gly Leu Leu Thr Val Phe Leu Thr Ile
                           200
                                                205
Thr Ala Asp Phe Ile Phe Ile Thr Ile Ser Tyr Ile Val Ile Leu Val
                                           220
                       215
Ser Ile Leu Arg Ser Gly Lys Ala Cys Leu Lys Ala Val Asn Thr Cys
                                       235
                   230
Ile Thr His Ile Ile Val Met Thr Val Ser Leu Thr Phe Ala Leu Ile
                                   250
                245
Ala Phe Leu Ser Tyr Arg Ile Arg Asn Phe Ser Pro Ser Ser Arg Val
                               265
Phe Leu Ser Thr Met Tyr Leu Phe Ile Pro Ser Cys Phe Asn Pro Ile
                           280
                                               285
Ile Tyr Gly Val Arg Thr Lys Glu Ile Arg Glu Gln Phe Leu Lys Leu
                       295
Met Lys Tyr Val Lys Val Phe Pro Lys
                    310
<210> 2682
<211> 328
<212> PRT
<213> Unknown (ICTORDG (fish32D L09223 1079248) Ngai-J 93)
<400>2682
Met Asn Ala Leu Asn Ser Ser Leu Leu Gln Asn Val Ser Phe Val Arg
                                   10
Pro Glu Tyr Phe Phe Ile Ser Gly Phe Ser Gly Ile Pro Phe Ser Gln
            20
                               25
Tyr. Tyr..Phe Val Phe Leu Ile Phe.Ile Tyr Ile Ile Ser Leu Cys Gly
                           40
Asn Ser Ile Val Leu Phe Met Ile Leu Val Asp Arg Thr Leu His Ile
                       55
Pro Lys Tyr Met Gly Ile Phe Asn Leu Ala Leu Ser Asp Phe Gly Glu
                   70
Thr Asn Ala Leu Ile Pro Ser Leu Val Lys Thr Leu Phe Phe Asp Ser
                                   90
Gln Tyr Ile Ser Tyr Asp Ala Cys Leu Ala Asn Met Phe Phe Thr Phe
                               105
Phe Phe Phe Gly Gly Gln Ala Leu Thr Leu Val Ala Leu Ala Tyr Asp
                           120
                                               125
Arg Phe Ile Ala Ile Cys Leu Pro Leu Arg Tyr His Ala Ile Val Asn
                       135
                                           140
Asn Ser Phe Met Phe Ala Thr Leu Thr Ala Ile Trp Val Phe Asn Leu
                                       155
                   150
```

```
Val Met Ile Gly Thr Leu Val Val Leu Ile Thr Arg Leu Ser Phe Cys
               165
                                   170
Lys Thr Asn Glu Ile Lys Ser Phe Phe Cys Asp His Gly Pro Val Tyr
                              185
           180
Thr Ile Ala Cys Asn Asp Asn Ser Ile Asn Ser Phe Met Ala Lys Leu
                          200
Cys Thr Ala Val Tyr Leu Tyr Ala Pro Leu Thr Ala Ile Val Leu Ser
                                           220
                       215
Tyr Ile Gly Ile Leu Leu Ala Leu Thr Lys Ile Thr Thr Trp Glu Ser
                   230
                                       235
Arg Leu Lys Ala Leu Lys Thr Cys Ile Ser His Leu Leu Val Val Gly
                                   250
               245
Val Phe Phe Leu Pro Ile Val Gly Thr Tyr Leu Ala Ala Leu Thr Phe
                               265
Ser Leu His Pro Asn Ala Arg Ile Ile Asn Thr Ser Leu Ser Arg Thr
                           280
       275
Ile Pro Pro Met Leu Asn Pro Ile Ile Tyr Val Leu Asn Thr Lys Asp
                      295
                                           300
Phe Arg Val Phe Ile Val Lys Met Leu Lys Lys Lys Thr Thr Lys Ile
                                       315
                   310
Ser Gln Val His Ala Leu Ala Lys
               325
<210> 2683
<211> 328
<212> PRT
<213> Unknown (ICTORDH (fish32C L09224 1079247) Ngai-J 93)
<400>2683
Met Ser Ala Leu Asn Ser Ser Leu Leu Gln Asn Val Ser Phe Val Arg
                                    10
                5
Pro Glu Tyr Phe Phe Ile Ser Gly Phe Ser Gly Ile Pro Phe Ser Gln
                               25
           20
Tyr Tyr Phe Val Phe Leu Ile Phe Ile Tyr Ile Ile Ser Leu Cys Gly
                                                45
                           40
Asn Ser Ile Val Leu Phe Met Ile Leu Val Asp Arg Thr Leu His Ile
                       55
                                           60
Pro Lys Tyr Met Gly Ile Phe Asn Leu Ala Leu Ser Asp Ile Gly Glu
                   70
                                       75
Thr Asn Ala Leu Ile Pro Ser Leu Val Lys Thr Leu Phe Phe Asp Ser
               85
Gln Tyr Ile Ser Tyr Asp Ala Cys Leu Thr Asn Met Phe Phe Thr Phe
                               105
                                                   110
           100
Phe Phe Ser Gly Gly Gln Ala Leu Thr Leu Val Ala Leu Ala Tyr Asp
                                               125
                           120
Arg Phe Ile Ala Ile Cys Leu Pro Leu Arg Tyr His Ala Ile Val Asn
                                           140
                       135
Asn Ser Phe Met Phe Ala Thr Leu Thr Ala Ile Trp Val Phe Asn Leu
                                       155
                   150
Val Ile Phe Gly Thr Thr Val Val Phe Ile Thr Arg Leu Ser Phe Cys
               165
                                   170
Lys Thr Asn Glu Ile Lys Ser Phe Phe Cys Asp His Gly Pro Val Tyr
                               185
Thr Ile Ala Cys Asn Asp Asn Ser Ile Asn Ser Phe Met Ala Lys Leu
                          200
                                                205
Cys Thr Ala Val Tyr Leu Tyr Ala Pro Leu Thr Ala Ile Val Leu Ser
                                            220
                      215
Tyr Ile Gly Ile Leu Leu Ala Leu Thr Lys Ile Thr Thr Trp Glu Ser
                   230
                                       235
Arg Leu Lys Ala Leu Lys Thr Cys Ile Ser His Leu Leu Val Val Gly
```

```
Val Phe Phe Leu Pro Ile Val Gly Thr Tyr Leu Ala Ala Leu Thr Phe
                                 265
 Ser Leu His Pro Asn Ala Arg Ile Ile Asn Thr Ser Leu Ser Arg Thr
                             280
                                                 285
 Ile Pro Pro Met Leu Asn Pro Ile Ile Tyr Val Leu Asn Thr Lys Asp
                         295
                                            300
 Phe Arg Val Phe Ile Val Lys Met Leu Lys Lys Lys Thr Thr Lys Ile
                    310
                                       315
 Ser Gln Val His Ala Leu Ala Lys
                325
 <210> 2684
 <211> 328
 <212> PRT
 <213> Unknown (ICTORDII (fish32B L09225 1079246) Ngai-J 93)
Met Ser Ala Leu Asn Ser Ser Leu Leu Gln Asn Val Ser Phe Val Arg
Pro Glu Tyr Phe Phe Ile Ser Gly Phe Ser Gly Ile Pro Phe Ser Gln
            20
                                 25
Tyr Tyr Phe Val Phe Leu Ile Phe Ile Tyr Ile Ile Ser Leu Cys Gly
                             40
                                                 45
Asn Ser Ile Val Leu Phe Met Ile Leu Val Asp Arg Thr Leu His Ile
                        55
Pro Lys Tyr Met Gly Ile Phe Asn Leu Ala Leu Ser Asp Phe Gly Glu
                    70
Thr Asn Ala Leu Ile Pro Ser Leu Val Lys Thr Leu Phe Phe Asp Ser
                85
                                    90
Gln Tyr Ile Ser Tyr Asp Ala Cys Leu Ala Asn Met Phe Phe Thr Phe
                                105
                                                    110
Phe Phe Ala Gly Gly Gln Ala Leu Thr Leu Val Ala Leu Ala Tyr Asp
                            120
                                                125
Arg Phe Ile Ala Ile Cys Leu Pro Leu Arg Tyr His Ala Ile Val Asn
                        135
                                            140
Asn Ser Phe Met Phe Val Thr Leu Ile Ala Ile Trp Val Phe Asn Val
                    150
                                        155
Val Ile Ile Gly Thr Thr Val Val Phe Ile Thr Arg Leu Ser Phe Cys
                                    170
Lys Thr Asn Glu Ile Lys Ser Phe Phe Cys Asp His Gly Pro Val Tyr
            180
                                185
Thr Ile Ala Cys Asn Asp Asn Ser Ile Asn Ser Phe Met Ala Tyr Phe
                            200
Cys Thr Ala Val Tyr Leu Tyr Ala Pro Leu Thr Ala Ile Val Leu Ser
                       215
                                            220
Tyr Ile Gly Ile Leu Leu Ala Leu Thr Lys Ile Thr Thr Trp Glu Ser
                    230
                                        235
Arg Leu Lys Ala Leu Lys Thr Cys Ile Ser His Leu Leu Val Val Gly
                                    250
Val Phe Phe Leu Pro Ile Val Gly Thr Tyr Leu Ala Ala Val Thr Phe
                                265
            260
Ser Leu His Pro Asn Ala Arg Ile Ile Asn Thr Ser Leu Ser Arg Thr
       275
                            280
Ile Pro Pro Met Leu Asn Pro Ile Ile Tyr Val Leu Asn Thr Lys Asp
                       295
                                            300
Phe Arg Val Phe Ile Val Lys Met Leu Lys Lys Lys Thr Thr Ile Ile
                   310
                                       315
Ser Gln Val His Ala Leu Ala Lys
```

<210> 2685

```
<211> 313
<212> PRT
<213> Unknown (oll (RATOL1RECE L34074) Guillaume-D 94)
Met Ser Val Ala Asn Glu Ser Ile Ser Arg Glu Phe Ile Leu Leu Gly
                                    10
                5
Phe Ser Asp Arg Pro Trp Leu Glu Leu Pro Leu Phe Val Val Phe Leu
                               25
           20
Val Ser Tyr Ile Leu Thr Ile Phe Gly Asn Met Met Ile Ile Leu Val
                           40
                                               45
Ser Arg Leu Asp Ser Lys Leu His Thr Pro Met Tyr Phe Phe Leu Thr
                                            60
Asn Leu Ser Leu Leu Asp Leu Cys Tyr Thr Thr Ser Thr Val Pro Gln
                   70
                                        75
Met Leu Ile Asn Ile Cys Ser Thr Arg Lys Val Ile Ser Tyr Gly Gly
                                   90
Cys Val Val Gln Leu Phe Ile Phe Leu Ser Leu Gly Ser Thr Glu Cys
                                                   110
                               105
           100
Phe Leu Leu Gly Val Met Ser Leu Asp Arg Phe Leu Ala Ile Cys Arg
                                               125
                           120
       115
Pro Leu His Tyr Ser Val Ile Met His Gln Arg Arg Cys Leu His Leu
                                           140
                       135
Ala Ala Ala Cys Trp Ile Ser Gly Phe Ser Asn Ser Val Leu Gln Ser
                                       155
                  150
Thr Trp Thr Leu Gln Met Pro Leu Cys Gly His Lys Glu Val Asp His
                                                        175
                                    170
               165
Phe Phe Cys Glu Val Pro Ala Leu Leu Lys Leu Ser Cys Val Asp Thr
                                                   190
                               185
           180
Thr Ala Asn Glu Ala Glu Leu Phe Phe Ile Ser Val Leu Phe Leu Leu
                           200
       195
Ile Pro Val Thr Leu Ile Leu Ile Ser Tyr Ala Phe Ile Val Gln Ala
                                            220
                       215
Val Leu Lys Ile Arg Ser Ala Glu Cys Arg Arg Lys Ala Phe Gly Thr
                                        235
                   230
Cys Gly Ser His Leu Ile Val Val Val Leu Phe Tyr Gly Thr Ala Ile
               245
                                   250
Tyr Met Tyr Leu Gln Pro Pro Ser Pro Ser Ser Lys Asp Arg Gly Lys
                                                   270
                               265
Met Val Ser Leu Phe Tyr Gly Ile Ile Thr Pro Met Leu Asn Pro Leu
                           280
Ile Tyr Thr Leu Arg Asn Glu Glu Val Lys Gly Ala Phe Lys Arg Leu
                                            300
                       295
Met Lys Arg Ile Ile Leu Ile Gly Lys
<210> 2686
<211> 333
<212> PRT
<213> Unknown (F3 (RATOLFPROB M64376 RNOLFP15 A23701) Buck-L 91)
<400>2686
Met Asp Ser Ser Asn Arg Thr Arg Val Ser Glu Phe Leu Leu Gly
                                    10
Phe Val Glu Asn Lys Asp Leu Gln Pro Leu Ile Tyr Gly Leu Phe Leu
                               25
Ser Met Tyr Leu Val Thr Val Ile Gly Asn Ile Ser Ile Ile Val Ala
                           40
Ile Ile Ser Asp Pro Cys Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                       55
Asn Leu Ser Phe Val Asp Ile Cys Phe Ile Ser Thr Thr Val Pro Lys
```

```
70
 Met Leu Val Asn Ile Gln Thr Gln Asn Asn Val Ile Thr Tyr Ala Gly
                85
                                    90
 Cys Ile Thr Gln Ile Tyr Phe Phe Leu Leu Phe Val Glu Leu Asp Asn
            100
                                105
 Phe Leu Leu Thr Ile Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
                            120
 Pro Met His Tyr Thr Val Ile Met Asn Tyr Lys Leu Cys Gly Phe Leu
                        135
                                            140
 Val Leu Val Ser Trp Ile Val Ser Val Leu His Ala Leu Phe Gln Ser
                    150
                                        155
 Leu Met Met Leu Ala Leu Pro Phe Cys Thr His Leu Glu Ile Pro His
                165
                                    170
 Tyr Phe Cys Glu Pro Asn Gln Val Ile Gln Leu Thr Cys Ser Asp Ala
            180
                                185
 Phe Leu Asn Asp Leu Val Ile Tyr Phe Thr Leu Val Leu Leu Ala Thr
                            200
 Val Pro Leu Ala Gly Ile Phe Tyr Ser Tyr Phe Lys Ile Val Ser Ser
                        215
                                            220
 Ile Cys Ala Ile Ser Ser Val His Gly Lys Tyr Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ala Ser His Leu Ser Val Val Ser Leu Phe Tyr Cys Thr Gly Leu
                245
                                    250
Gly Val Tyr Leu Ser Ser Ala Ala Asn Asn Ser Ser Gln Ala Ser Ala
            260
                                265
Thr Ala Ser Val Met Tyr Thr Val Val Thr Pro Met Val Asn Pro Phe
                            280
                                                285
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Ser Val Leu Lys Lys Thr
                        295
                                            300
Leu Cys Glu Glu Val Ile Arg Ser Pro Pro Ser Leu Leu His Phe Phe
                    310
                                        315
Leu Val Leu Cys His Leu Pro Cys Phe Ile Phe Cys Tyr
                325
<210> 2687
<211> 313
<212> PRT
<213> Unknown (F5 (RATOLFPROC M64377 RNOLFP17 OLF5 P23266 B23701) Buck-L 91)
<400>2687
Met Ser Ser Thr Asn Gln Ser Ser Val Thr Glu Phe Leu Leu Gly
                                    10
Leu Ser Arg Gln Pro Gln Gln Gln Leu Leu Phe Leu Phe Leu
                                25
Ile Met Tyr Leu Ala Thr Val Leu Gly Asn Leu Leu Ile Ile Leu Ala
Ile Gly Thr Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                        55
Asn Leu Ser Phe Val Asp Val Cys Phe Ser Ser Thr Thr Val Pro Lys
                                        75
Val Leu Ala Asn His Ile Leu Gly Ser Gln Ala Ile Ser Phe Ser Gly
                                    90
Cys Leu Thr Gln Leu Tyr Phe Leu Ala Val Phe Gly Asn Met Asp Asn
                               105
Phe Leu Leu Ala Val Met Ser Tyr Asp Arg Phe Val Ala Ile Cys His
       115
                           120
Pro Leu His Tyr Thr Thr Lys Met Thr Arg Gln Leu Cys Val Leu Leu
                       135
Val Val Gly Ser Trp Val Val Ala Asn Met Asn Cys Leu Leu His Ile
                   150
                                       155
Leu Leu Met Ala Arg Leu Ser Phe Cys Ala Asp Asn Met Ile Pro His
```

```
170
                165
Phe Phe Cys Asp Gly Thr Pro Leu Leu Lys Leu Ser Cys Ser Asp Thr
                               185
His Leu Asn Glu Leu Met Ile Leu Thr Glu Gly Ala Val Val Met Val
                            200
                                                205
Thr Pro Phe Val Cys Ile Leu Ile Ser Tyr Ile His Ile Thr Cys Ala
                       215
                                            220
Val Leu Arg Val Ser Ser Pro Arg Gly Gly Trp Lys Ser Phe Ser Thr
                   230
                                       235
Cys Gly Ser His Leu Ala Val Val Cys Leu Phe Tyr Gly Thr Val Ile
                                   250
               245
Ala Val Tyr Phe Asn Pro Ser Ser His Leu Ala Gly Arg Asp Met
           260
                               265
Ala Ala Ala Val Met Tyr Ala Val Val Thr Pro Met Leu Asn Pro Phe
                           280
Ile Tyr Ser Leu Arg Asn Ser Asp Met Lys Ala Ala Leu Arg Lys Val
                       295
Leu Ala Met Arg Phe Pro Ser Lys Gln
                310
<210> 2688
<211> 311
<212> PRT
<213> Unknown (F6 (RATOLFPROD RNOLFP01 M64378) Buck-L 91)
<400>2688
Met Ala Trp Ser Thr Gly Gln Asn Leu Ser Thr Pro Gly Pro Phe Ile
                                    10
Leu Leu Gly Phe Pro Gly Pro Arg Ser Met Arg Ile Gly Leu Phe Leu
                               25
Leu Phe Leu Val Met Tyr Leu Leu Thr Val Val Gly Asn Leu Ala Ile
                           40
Ile Ser Leu Val Gly Ala His Arg Cys Leu Gln Thr Pro Met Tyr Phe
                       55
                                           60
Phe Leu Cys Asn Leu Ser Phe Leu Glu Ile Trp Phe Thr Thr Ala Cys
                   70
                                       75
Val Pro Lys Thr Leu Ala Thr Phe Ala Pro Arg Gly Gly Val Ile Ser
Leu Ala Gly Cys Ala Thr Gln Met Tyr Phe Val Phe Ser Leu Gly Cys
           100
                               105
Thr Glu Tyr Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Leu Ala
                           120
Ile Cys Leu Pro Leu Arg Tyr Gly Gly Ile Met Thr Pro Gly Leu Ala
                       135
                                           140
Met Arg Leu Ala Leu Gly Ser Trp Leu Cys Gly Phe Ser Ala Ile Thr
                  150
                                       155
Val Pro Ala Thr Leu Ile Ala Arg Leu Ser Phe Cys Gly Ser Arg Val
               165
                                   170
Ile Asn His Phe Phe Cys Asp Ile Ser Pro Trp Ile Val Leu Ser Cys
           180
                               185
Thr Asp Thr Gln Val Val Glu Leu Val Ser Phe Gly Ile Ala Phe Cys
                           200
Val Ile Leu Gly Ser Cys Gly Ile Thr Leu Val Ser Tyr Ala Tyr Ile
                       215
Ile Thr Thr Ile Ile Lys Ile Pro Ser Ala Arg Gly Arg His Arg Ala
                   230
                                       235
Phe Ser Thr Cys Ser Ser His Leu Thr Val Val Leu Ile Trp Tyr Gly
               245
                                   250
Ser Thr Ile Phe Leu His Val Arg Thr Ser Val Glu Ser Ser Leu Asp
                               265
Leu Thr Lys Ala Ile Thr Val Leu Asn Thr Ile Val Thr Pro Val Leu
```

```
275
                             280
                                                 285
 Asn Pro Phe Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys Glu Ala Leu
 Arg Arg Thr Val Lys Gly Lys
 <210> 2689
 <211> 317
 <212> PRT
 <213> Unknown (F12 (RATOLFPROG OLF2 P23268 M64381 D23701) Buck-L 91)
 <400>2689
Met Glu Ser Gly Asn Ser Thr Arg Arg Phe Ser Ser Phe Phe Leu Leu
 1
                                    10
Gly Phe Thr Glu Asn Pro Gln Leu His Phe Leu Ile Phe Ala Leu Phe
                                25
Leu Ser Met Tyr Leu Val Thr Val Leu Gly Asn Leu Leu Ile Ile Met
                            40
                                                45
Ala Ile Ile Thr Gln Ser His Leu His Thr Pro Met Tyr Phe Phe Leu
                        55
                                            60
Ala Asn Leu Ser Phe Val Asp Ile Cys Phe Thr Ser Thr Thr Ile Pro
                    70
                                        75
Lys Met Leu Val Asn Ile Tyr Thr Gln Ser Lys Ser Ile Thr Tyr Glu
Asp Cys Ile Ser Gln Met Cys Val Phe Leu Val Phe Ala Glu Leu Gly
            100
                                105
Asn Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Arg Cys
                            120
                                                125
His Pro Leu Cys Tyr Thr Val Ile Val Asn His Arg Leu Cys Ile Leu
                        135
                                            140
Leu Leu Leu Ser Trp Val Ile Ser Ile Phe His Ala Phe Ile Gln
                    150
                                        155
Ser Leu Ile Val Leu Gln Leu Thr Phe Cys Gly Asp Val Lys Ile Pro
                                    170
His Phe Phe Cys Glu Leu Asn Gln Leu Ser Gln Leu Thr Cys Ser Asp
            180
                                185
Asn Phe Pro Ser His Leu Ile Met Asn Leu Val Pro Val Met Leu Ala
                            200
                                                205
Ala Ile Ser Phe Ser Gly Ile Leu Tyr Ser Tyr Phe Lys Ile Val Ser
                        215
                                            220
Ser Ile His Ser Ile Ser Thr Val Gln Gly Lys Tyr Lys Ala Phe Ser
                    230
                                        235
Thr Cys Ala Ser His Leu Ser Ile Val Ser Leu Phe Tyr Ser Thr Gly
                245
                                    250
Leu Gly Val Tyr Val Ser Ser Ala Val Val Gln Ser Ser His Ser Ala
            260
                                265
Ala Ser Ala Ser Val Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro
        275
                            280
Phe Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Arg Ala Leu Glu Arg
                       295
Leu Leu Glu Gly Asn Cys Lys Val His His Trp Thr Gly
                   310
<210> 2690
<211> 310
<213> Unknown (I3 (RATOLFPROK OLFO P23269 M64385 RNOLFP08 E23701) Buck-L 91)
<400>2690
Met Asn Asn Gln Thr Phe Ile Thr Gln Phe Leu Leu Gly Leu Pro
```

```
Ile Pro Glu Glu His Gln His Leu Phe Tyr Ala Leu Phe Leu Val Met
                                25
Tyr Leu Thr Thr Ile Leu Gly Asn Leu Leu Ile Ile Val Leu Val Gln
Leu Asp Ser Gln Leu His Thr Pro Met Tyr Leu Phe Leu Ser Asn Leu
                                            60
                       55
Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys Leu Leu
                   70
                                        75
Gln Asn Met Arg Ser Gln Asp Thr Ser Ile Pro Tyr Gly Gly Cys Leu
                                    90
               85
Ala Gln Thr Tyr Phe Phe Met Val Phe Gly Asp Met Glu Ser Phe Leu
                               105
                                                    110
           100
Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe Pro Leu
                           120
His Tyr Thr Ser Ile Met Ser Pro Lys Leu Cys Thr Cys Leu Val Leu
                       135
                                            140
Leu Leu Trp Met Leu Thr Thr Ser His Ala Met Met His Thr Leu Leu
                                        155
                    150
Ala Ala Arg Leu Ser Phe Cys Glu Asn Asn Val Val Leu Asn Phe Phe
               165
                                    170
Cys Asp Leu Phe Val Leu Leu Lys Leu Ala Cys Ser Asp Thr Tyr Ile
                                                    190
                               185
           180
Asn Glu Leu Met Ile Phe Ile Met Ser Thr Leu Leu Ile Ile Pro
                           200
       195
Phe Phe Leu Ile Val Met Ser Tyr Ala Arg Ile Ile Ser Ser Ile Leu
                       215
                                           220
Lys Val Pro Ser Thr Gln Gly Ile Cys Lys Val Phe Ser Thr Cys Gly
225
                   230
                                       235
Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile Gly Leu
                                    250
               245
Tyr Leu Cys Pro Ala Gly Asn Asn Ser Thr Val Lys Glu Met Val Met
                                265
           260
Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe Ile Tyr
                           280
                                               285
Ser Leu Arg Asn Arg Asp Met Lys Arg Ala Leu Ile Arg Val Ile Cys
                       295
Ser Met Lys Ile Thr Leu
<210> 2691
<211> 312
<213> Unknown (I8 (RATOLFPROM M64387 RNOLFP09) Buck-L 91)
<400>2691
Met Asn Asn Lys Thr Val Ile Thr His Phe Leu Leu Cly Leu Pro
                                    10
Ile Pro Pro Glu His Gln Gln Leu Phe Phe Ala Leu Phe Leu Ile Met
                                25
Tyr Leu Thr Thr Phe Leu Gly Asn Leu Leu Ile Val Val Leu Val Gln
                                                45
       35
                           40
Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser Asn Leu
                       55
                                           60
Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Leu Lys Leu Leu
                                       75
                   70
Gln Asn Ile Gln Ser Gln Val Pro Ser Ile Ser Tyr Ala Gly Cys Leu
                                   90
Thr Gln Ile Phe Phe Leu Leu Phe Gly Tyr Leu Gly Asn Phe Leu
                               105
Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe Pro Leu
                           120
```

```
His Tyr Thr Asn Ile Met Ser His Lys Leu Cys Thr Cys Leu Leu
                    135
                                           140
Val Phe Trp Ile Met Thr Ser Ser His Ala Met Met His Thr Leu Leu
                    150
                                        155
Ala Ala Arg Leu Ser Phe Cys Glu Asn Asn Val Leu Leu Asn Phe Phe
                165
                                    170
Cys Asp Leu Phe Val Leu Leu Lys Leu Ala Cys Ser Asp Thr Tyr Val
                                185
Asn Glu Leu Met Ile His Ile Met Gly Val Ile Ile Ile Val Ile Pro
                            200
Phe Val Leu Ile Val Ile Ser Tyr Ala Lys Ile Ile Ser Ser Ile Leu
                        215
                                            220
Lys Val Pro Ser Thr Gln Ser Ile His Lys Val Phe Ser Thr Cys Gly
                    230
                                       235
Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile Gly Leu
                245
                                    250
Tyr Leu Cys Pro Ser Gly Asp Asn Phe Ser Leu Lys Gly Ser Ala Met
            260
                               265
Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe Ile Tyr
                            280
Ser Leu Arg Asn Arg Asp Met Lys Gln Ala Leu Ile Arg Val Thr Cys
                        295
Ser Lys Lys Ile Ser Leu Pro Trp
<210> 2692
<211> 314
<212> PRT
<213> Unknown (I9 (RATOLFPRON OLF9 H23701 M64388 RNOLFP10 P23272) Buck-L 91)
Met Thr Arg Arg Asn Gln Thr Ala Ile Ser Gln Phe Phe Leu Leu Gly
                                    10
Leu Pro Phe Pro Pro Glu Tyr Gln His Leu Phe Tyr Ala Leu Phe Leu
                                25
Ala Met Tyr Leu Thr Thr Leu Leu Gly Asn Leu Ile Ile Ile Leu
                            40
Ile Leu Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser
                        55
                                            60
Asn Leu Ser Phe Ala Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys
                    70
                                        75
Leu Leu Gln Asn Met Gln Ser Gln Val Pro Ser Ile Pro Tyr Ala Gly
                85
                                    90
Cys Leu Ala Gln Ile Tyr Phe Phe Leu Phe Phe Gly Asp Leu Gly Asn
            100
                                105
Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
                            120
                                                125
Pro Leu His Tyr Met Ser Ile Met Ser Pro Lys Leu Cys Val Ser Leu
                        135
                                            140
Val Val Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His Thr
                    150
                                        155
Leu Leu Met Ala Arg Leu Ser Phe Cys Glu Asp Ser Val Ile Pro His
                165
                                    170
Tyr Phe Cys Asp Met Ser Thr Leu Leu Lys Val Ala Cys Ser Asp Thr
           180
                                185
                                                    190
His Asp Asn Glu Leu Ala Ile Phe Ile Leu Gly Gly Pro Ile Val Val
                           200
                                                205
Leu Pro Phe Leu Leu Ile Ile Val Ser Tyr Ala Arg Ile Val Ser Ser
                       215
                                           220
Ile Phe Lys Val Pro Ser Ser Gln Ser Ile His Lys Ala Phe Ser Thr
                                       235
```

```
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Val Ile
               245
                                  250
Gly Leu Tyr Leu Cys Pro Ser Ala Asn Asn Ser Thr Val Lys Glu Thr
                              265
                                                  270
           260
Val Met Ser Leu Met Tyr Thr Met Val Thr Pro Met Leu Asn Pro Phe
                       280
                                              285
       275
Ile Tyr Ser Leu Arg Asn Arg Asp Ile Lys Asp Ala Leu Glu Lys Ile
                      295
Met Cys Lys Lys Gln Ile Pro Ser Phe Leu
                   310
<210> 2693
<211> 312
<212> PRT
<213> Unknown (I14 (RATOLFPROQ OLF4 I23701 P23273 M64391 RNOLFP14) Buck-L 91)
Met Thr Gly Asn Asn Gln Thr Leu Ile Leu Glu Phe Leu Leu Gly
                                   10
Leu Pro Ile Pro Ser Glu Tyr His Leu Leu Phe Tyr Ala Leu Phe Leu
                               25
Ala Met Tyr Leu Thr Ile Ile Leu Gly Asn Leu Leu Ile Ile Val Leu
                                              45
                           40
Val Arg Leu Asp Ser His Leu His Met Pro Met Tyr Leu Phe Leu Ser
                       55
                                          60
Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys
                   70
                                       75
Leu Leu Gln Asn Met Gln Ser Gln Val Pro Ser Ile Ser Tyr Thr Gly
                                   90
Cys Leu Thr Gln Leu Tyr Phe Phe Met Val Phe Gly Asp Met Glu Ser
           100
                               105
Phe Leu Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
                           120
                                              125
Pro Leu Arg Tyr Thr Thr Ile Met Ser Thr Lys Phe Cys Ala Ser Leu
                       135
Val Leu Leu Trp Met Leu Thr Met Thr His Ala Leu Leu His Thr
                  150
                                       155
Leu Leu Ile Ala Arg Leu Ser Phe Cys Glu Lys Asn Val Ile Leu His
                                  170
              165
Phe Phe Cys Asp Ile Ser Ala Leu Leu Lys Leu Ser Cys Ser Asp Ile
          180
                              185
Tyr Val Asn Glu Leu Met Ile Tyr Ile Leu Gly Gly Leu Ile Ile Ile
                           200
                                               205
Ile Pro Phe Leu Leu Ile Val Met Ser Tyr Val Arg Ile Phe Phe Ser
                       215
                                           220
Ile Leu Lys Phe Pro Ser Ile Gln Asp Ile Tyr Lys Val Phe Ser Thr
                                      235
                  230
Cys Gly Ser His Leu Ser Val Val Thr Leu Phe Tyr Gly Thr Ile Phe
                                  250
              245
Gly Ile Tyr Leu Cys Pro Ser Gly Asn Asn Ser Thr Val Lys Glu Ile
                              265
Ala Met Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                       280
                                              285
Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Arg Ala Leu Ile Arg Val
                      295
Ile Cys Thr Lys Lys Ile Ser Leu
                   310
<210> 2694
```

<211> 314

<212> PRT

<213> Unknown (I15 (RATOLFPROR A37286 M64391 RNOLFP16) Buck-L 91) Met Thr Glu Glu Asn Gln Thr Val Ile Ser Gln Phe Leu Leu Phe 1 Leu Pro Ile Pro Ser Glu His Gln His Val Phe Tyr Ala Leu Phe Leu Ser Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Ile Ile Ile Leu 45 Ile His Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser 60 Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys 70 Leu Leu Gln Asn Met Gln Ser Gln Val Pro Ser Ile Pro Phe Ala Gly 85 90 Cys Leu Thr Gln Leu Tyr Phe Tyr Leu Tyr Phe Ala Asp Leu Glu Ser 100 105 Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe 120 Pro Leu His Tyr Met Ser Ile Met Ser Pro Lys Leu Cys Val Ser Leu 135 140 Val Val Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His Thr 150 155 Leu Leu Met Ala Arg Leu Ser Phe Cys Ala Asp Asn Met Ile Pro His 170 Phe Phe Cys Asp Ile Ser Pro Leu Leu Lys Leu Ser Cys Ser Asp Thr 180 185 His Val Asn Glu Leu Val Ile Phe Val Met Gly Gly Leu Val Ile Val 200 Ile Pro Phe Val Leu Ile Ile Val Ser Tyr Ala Arg Val Val Ala Ser 215 220 Ile Leu Lys Val Pro Ser Val Arg Gly Ile His Lys Ile Phe Ser Thr 230 235 Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile 250 Gly Leu Tyr Leu Cys Pro Ser Ala Asn Asn Ser Thr Val Lys Glu Thr 260 265 Val Met Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe 275 280 Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Glu Ala Leu Ile Arg Val 295 300 Leu Cys Lys Lys Ile Thr Phe Cys Leu 310 <210> 2695 <211> 309 <212> PRT <213> Unknown (RNOLP4 (517366 631861 1083741 S51356) Gat-U 94) <400>2695 Met Met Gly Thr Gly Asn His Ser Ala Val Val Val Phe Val Leu Val 10 Gly Leu Thr Lys Gln Pro Glu Leu Leu Pro Leu Phe Phe Leu Phe 20 25 Leu Val Ile Tyr Val Leu Thr Val Val Gly Asn Leu Gly Met Ile Leu 40 Leu Ile Ile Val Ser Pro Leu Leu His Thr Pro Met Tyr Tyr Phe Leu 55 60 Ser Ser Leu Ser Phe Val Asp Leu Cys Tyr Ser Thr Val Ile Thr Pro 75 Lys Met Leu Val Asn Phe Leu Gly Lys Lys Asn Phe Ile Thr Tyr Ser

```
90
Glu Cys Met Ala Gln Phe Phe Phe Phe Ala Ile Phe Val Val Thr Glu
                    105
          100
Gly Tyr Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys
                                               125
                          120
Arg Pro Leu Leu Tyr Asn Val Ile Met Ser Ser Arg Ile Cys Ser Leu
                       135
                                           140
Leu Val Leu Val Ala Phe Ser Leu Gly Leu Phe Ser Ala Val Val His
                                      155
                   150
Thr Ser Ala Met Met Asn Leu Ser Phe Cys Lys Ser Tyr Ile Ile Ser
                                  170
               165
His Tyr Phe Cys Asp Ala Leu Pro Leu Leu Lys Leu Ala Cys Ser Asn
                                                  190
                               185
           180
Thr His Leu Asn Glu Leu Leu Ile Phe Ile Ile Gly Gly Leu Asn Thr
                                               205
                          200
Leu Val Pro Thr Leu Ala Val Ala Ile Ser Tyr Val Phe Ile Phe Cys
                                          220
                      215
Ser Ile Leu Arg Ile Arg Ser Ser Glu Gly Arg Ser Lys Ala Phe Gly
                                       235
                  230
Thr Cys Ser Ser His Leu Met Ala Val Gly Ile Phe Phe Gly Ser Ile
               245
                                   250
Thr Phe Met Tyr Leu Lys Pro Ser Ser Ser Asn Ser Leu Glu Gln Glu
                               265
           260
Lys Val Ser Ser Val Phe Tyr Thr Thr Val Ile Pro Met Leu Asn Pro
                                              285
                          280
      275
Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Lys Ala Leu Gly Arg
                       295
Phe Ser Val Arg Ser
<210> 2696
<211> 318
<212> PRT
<213> Unknown (TB641 (RNU50949 1256393) Thomas-MB 96)
<400>2696
Met Arg Arg Asn Arg Asn Thr Ser Leu Asp Thr Val Val Thr Asp Phe
                5
                                   10
Leu Leu Leu Gly Leu Ala His Pro Pro Asn Leu Arg Thr Phe Leu Phe
                               25
           20
Leu Val Phe Leu Leu Ile Tyr Ile Leu Thr Gln Leu Gly Asn Leu Leu
                           40
Ile Leu Leu Thr Val Trp Ala Asp Pro Lys Leu His Ala Arg Pro Met
                                          60
                       55
Tyr Ile Leu Leu Gly Val Leu Ser Phe Leu Asp Met Trp Leu Ser Ser
                   70
                                       75
Val Ile Val Pro Arg Ile Ile Leu Asn Phe Thr Pro Ala Asn Lys Ala
                                  90
Ile Ala Phe Gly Gly Cys Val Ala Gln Leu Tyr Phe Phe His Phe Leu
                                                   110
           100
                               105
Gly Ser Thr Gln Cys Phe Leu Tyr Thr Leu Met Ala Tyr Asp Arg Tyr
                                               125
                           120
Leu Ala Ile Cys Gln Pro Leu Arg Tyr Pro Val Leu Met Asn Gly Lys
                                           140
                       135
Leu Cys Thr Ile Leu Val Ala Gly Ala Trp Val Ala Gly Ser Ile His
                                       155
                   150
Gly Ser Ile Gln Ala Thr Leu Thr Phe Arg Leu Pro Tyr Cys Gly Pro
                                  170
              165
Lys Glu Val Asp Tyr Phe Phe Cys Asp Ile Pro Ala Val Leu Arg Leu
                               185
                                                   190
Ala Cys Ala Asp Thr Ala Ile Asn Glu Leu Val Thr Phe Val Asp Ile
```

```
195
                            200
                                                205
Gly Val Val Ala Ala Ser Cys Phe Leu Leu Ile Leu Leu Ser Tyr Ala
                        215
                                            220
Asn Ile Val His Ala Ile Leu Lys Ile Arg Thr Ala Asp Gly Arg Arg
                   230
                                        235
Arg Ala Phe Ser Thr Cys Gly Ser His Leu Thr Val Val Thr Val Tyr
                                    250
                245
Tyr Val Pro Cys Ile Phe Ile Tyr Leu Arg Ala Gly Ser Lys Ser Ser
                                265
Phe Asp Gly Ala Val Ala Val Phe Tyr Thr Val Val Thr Pro Leu Leu
       275
                           280
                                               285
Asn Pro Leu Ile Tyr Thr Leu Arg Asn Gln Glu Val Asn Ser Ala Leu
                      295
                                           300
Lys Arg Leu Arg Ala Gly Arg Gly Asn Val Gly Gly Asp Lys
                   310
<210> 2697
<211> 315
<212> PRT
<213> Unknown (TB567 (RNU50948 1256391) Thomas-MB 96)
<400>2697
Met Thr Gln Arg Asn Ala Thr Glu Val Thr Asp Phe Tyr Leu Leu Gly
                                   10
Phe Gly Val Gln Gln Asn Thr Gln Cys Val Leu Phe Ile Val Phe Phe
                               25
Val Ile Tyr Val Thr Ser Met Val Gly Asn Thr Gly Met Ile Leu Leu
   35
                           40
                                               45
Ile Asn Thr Asn Ser Arg Leu Gln Thr Pro Met Tyr Phe Phe Leu Gln
                       55
                                           60
Asn Leu Ala Phe Val Asp Ile Cys Tyr Thr Ser Ala Ile Thr Pro Lys
                                       75
                   70
Met Leu Gln Ser Phe Met Val Glu Asp Cys Ser Ile Ser Tyr Thr Gly
                                   90
Cys Val Ile Gln Leu Leu Val Tyr Ala Thr Phe Ala Thr Ser Asp Cys
                                105
Tyr Leu Leu Ala Val Met Ala Val Asp Arg Tyr Val Ala Ile Cys Lys
                           120
Pro Leu Arg Tyr Pro Ile Ile Met Ser Arg Gln Val Cys Leu Leu Leu
                       135
                                           140
Val Ala Leu Ser Tyr Leu Met Gly Ser Ile Asn Ser Ser Val His Thr
                   150
                                       155
Gly Phe Thr Phe Ser Leu Ser Tyr Cys Asn Ser Lys Asn Ile Asn His
               165
                                   170
Phe Phe Cys Asp Val Val Pro Ile Ile Ser Leu Ser Cys Ser Asn Thr
           180
                               185
                                                   190
Asp Ile Asn Ile Met Leu Leu Ile Val Phe Val Gly Phe Asn Leu Thr
      195
                           200
                                               205
Phe Thr Val Leu Val Ile Ile Phe Ser Tyr Ile Tyr Ile Met Ala Ala
                       215
                                           220
Ile Leu Lys Met Ser Ser Thr Ala Gly Arg Lys Lys Thr Phe Ser Thr
                   230
                                       235
Cys Ala Ser His Leu Thr Ala Val Thr Ile Phe Tyr Gly Thr Leu Ser
               245
                                   250
Tyr Met Tyr Leu Gln Pro His Ser Asp Asn Ser Glu Glu Asn Met Lys
           260
                               265
                                                   270
Val Ala Ser Val Phe Tyr Gly Ile Val Ile Pro Met Leu Asn Pro Leu
                           280
                                               285
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Glu Gly Phe Lys Ala Met
                       295
Ser Arg Arg Phe Leu Arg Met Lys Ser Asn Pro
```

```
305
                    310
                                        315
<210> 2698
<211> 311
<212> PRT
<213> Unknown (TB334 (RNU50947 1256389) Thomas-MB 96)
<400>2698
Met Glu Asn Gln Ser Ser Val Ser Glu Phe Phe Leu Arg Gly Ile Ser
                                    10
Gly Phe Pro Glu Gln Gln Leu Leu Tyr Gly Leu Phe Leu Cys Met
            20
                                25
Tyr Leu Val Thr Leu Thr Gly Asn Val Leu Ile Ile Leu Ala Ile Gly
                            40
Ser Asp Pro His Leu His Thr Pro Met Tyr Phe Phe Leu Ala Asn Leu
                        55
Ser Phe Ala Asp Met Gly Leu Ile Ser Ser Thr Val Thr Lys Met Leu
                                        75
Phe Asn Val Gln Thr Gln Cys His Thr Ile Ser Tyr Thr Gly Cys Leu
                85
                                    90
                                                        95
Thr Gln Met Tyr Leu Phe Met Met Phe Gly Asp Leu Asp Ser Phe Phe
            100
                               105
                                                    110
Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu
                            120
                                                125
His Tyr Ser Thr Ile Met Asn Ala Arg Ile Cys Val Leu Met Leu Ile
                        135
Leu Cys Trp Ile Leu Thr Asn Val Val Ala Leu Thr His Thr Leu Leu
                    150
                                        155
Met Ala Arg Leu Ser Phe Cys Val Val Gly Glu Ile Ala His Phe Phe
                                    170
                165
Cys Asp Val Thr Ser Val Met Lys Leu Ser Cys Ser Asp Thr His Val
                                185
            180
Asn Glu Leu Val Leu Ser Gly Phe Gly Gly Thr Val Leu Met Val Pro
                            200
Phe Val Ser Ile Val Ile Ser Tyr Val His Ile Val Phe Ala Val Leu
                        215
                                            220
Arg Ile Gln Ser Ser Gly Gly Ser Ser Lys Ala Phe Ser Thr Cys Ser
                    230
                                        235
Ser His Leu Cys Val Val Cys Val Phe Tyr Gly Thr Leu Phe Ser Val
                245
                                    250
Tyr Leu Phe Pro Ser Ser Val Glu Thr Thr Glu Lys Asp Val Ala Ala
                                265
                                                    270
            260
Ala Ala Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe Ile Tyr
                           280
       275
                                               285
Ser Leu Arg Asn Lys Asp Ile Lys Gly Ala Leu Lys Arg Leu Leu Ser
                       295
His Arg Arg Ile Leu Ser Ser
<210> 2699
<211> 312
<212> PRT
<213> Unknown (OR12 (423700 S29708) Raming-K 93)
<400>2699
Met Ile Met Asn Asn Gln Thr Val Ile Ser Gln Phe Leu Leu Gly
                                    10
Leu Pro Ile Pro Pro Glu His Trp His Leu Phe Tyr Thr Leu Leu Leu
            20
                                25
Ala Met Tyr Leu Thr Thr Ile Leu Gly Asn Leu Ile Ile Ile Leu
       35
                            40
```

```
Ile Leu Leu Asp Ser Asn Leu His Ile Pro Met Tyr Leu Phe Leu Ser
Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys
                    70
Leu Leu Gln Asn Met Gln Asn Gln Asp Thr Ser Ile Thr Tyr Thr Gly
                                    90
Cys Leu Thr Gln Met Tyr Phe Ser Met Val Phe Ala Gly Met Glu Ile
            100
                                105
Phe Leu Leu Val Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Leu
        115
                            120
Pro Leu His Tyr Thr Ser Ile Met Ser Pro Lys Phe Cys Val Cys Leu
                        135
                                            140
Gly Ser Leu Ser Trp Val Phe Asn Val Leu Tyr Ser Met Leu His Thr
                   150
                                        155
Leu Leu Leu Ala Arg Leu Ser Phe Cys Lys Asp Asn Val Ile Pro His
                165
                                   170
Phe Phe Cys Asp Ile Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp Thr
                                185
Tyr Ile Asn Glu Leu Met Ile Phe Ile Leu Gly Gly Leu Leu Ile Val
                            200
Ile Pro Phe Leu Leu Ile Val Met Thr Tyr Val Gln Ile Val Cys Ser
                        215
                                            220
Ile Leu Lys Val Pro Ser Thr Arg Ala Ile Tyr Lys Ile Phe Ser Thr
                   230
                                       235
Cys Gly Ser His Leu Ser Thr Val Ser Leu Phe Tyr Gly Thr Val Ile
                245
                                   250
Gly Leu Tyr Leu Cys Pro Ser Ala Asn Asn Ser Thr Val Lys Glu Thr
                                265
                                                    270
Val Met Ala Met Met Ile Thr Val Val Thr Pro Met Leu Asn Pro Phe
                            280
Ile Tyr Ser Leu Arg Asn Arg Asp Ile Lys Glu Ala Leu Val Arg Val
                        295
Leu Ile Lys Lys Lys Ile Ser Leu
                    310
<210> 2700
<211> 304
<212> PRT
<213> Unknown (OR14 (423701) Raming-K 93)
<400>2700
Ser Val Thr Glu Phe Ile Leu Ala Gly Leu Thr Asp Gln Pro Gly Leu
                                    10
Arg Met Pro Leu Phe Phe Leu Phe Leu Gly Phe Tyr Met Val Thr Val
           20
                                25
Val Gly Asn Leu Ile Gly Leu Phe Leu Ile Gly Leu Asn Ser His Leu
                            40
                                                45
His Thr Pro Met Tyr Phe Phe Leu Phe Asn Leu Ser Val Val Asp Phe
                        55
                                            60
Cys Phe Ser Ser Thr Ile Ile Pro Lys Met Leu Met Ser Phe Ile Ser
                    70
                                        75
Lys Lys Asn Ile Ile Ser His Ser Gly Cys Met Thr Gln Leu Phe Phe
Phe Cys Phe Phe Val Val Ser Glu Thr Phe Ile Leu Ser Ala Met Ala
                                105
Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu Met Tyr Thr Val Thr
                            120
Met Ser Pro Gln Val Cys Leu Leu Leu Leu Gly Ala Tyr Val Met
                        135
                                           140
Gly Phe Ser Glu Ala Met Ala His Thr Gly Asn Leu Met Asn Leu Thr
                    150
                                        155
```

```
Phe Cys Ala Asp Asn Leu Val Asn His Phe Met Cys Asp Ile Leu Pro
                165
                                    170
Leu Leu Glu Leu Ser Cys Asn Ser Thr Phe Ile Asn Glu Leu Val Val
                                185
            180
Phe Ile Val Val Ala Ile Asp Ile Ala Val Pro Ile Val Ser Ile Phe
                            200
                                                205
Ile Ser Tyr Ala Leu Ile Leu Ser Ser Ile Leu Arg Met His Ser Thr
                        215
                                            220
Glu Gly Arg Ser Lys Ala Phe Ser Thr Cys Ser Ser His Leu Ile Val
                                       235
                   230
Val Cys Leu Leu Phe Gly Ser Gly Ala Phe Met Tyr Leu Lys Leu Pro
                                   250
                245
Ser Ile Leu Pro Leu Asp Gln Gly Lys Val Ser Ser Leu Phe Tyr Thr
                               265
            260
Ile Val Val Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys
                           280
                                               285
Asp Val Lys Val Ala Leu Arg Lys Thr Leu Gly Lys Ile Ile Leu Ser
                        295
<210> 2701
<211> 307
<212> PRT
<213> Unknown (OR18 (423702) Raming-K 93)
Met Gly Glu Asn Asn Ile Thr Glu Phe Ile Leu Leu Gly Leu Thr
                                    10
Gln Asp Pro Asp Gly Arg Lys Ala Leu Phe Val Ile Phe Phe Leu Ile
                                25
            20
Tyr Ile Val Thr Met Met Gly Asn Leu Leu Ile Val Val Thr Val Ile
Ala Ser Pro Ser Leu Gly Ser Pro Met Tyr Phe Phe Leu Ala Ser Leu
                        55
                                            60
Ser Leu Leu Asp Ala Leu Phe Ser Thr Ala Ile Ser Pro Lys Leu Ile
                   70
                                        75
Ala Asp Leu Leu Tyr Asp Gln Lys Thr Ile Ser Phe Arg Ala Cys Met
                                    90
                85
Ser Gln Leu Phe Ile Glu His Leu Phe Gly Gly Val Asp Ile Val Ile
            100
                                105
                                                    110
Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                                                125
        115
                           120
His Tyr Leu Ala Ile Met Asn Arg Arg Val Cys Ile Thr Leu Leu Ile
                                           140
    130
                       135
Phe Ala Trp Thr Gly Gly Phe Thr His Ser Leu Ile Gln Ile Val Phe
                   150
                                       155
Val Tyr Asn Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Phe Ile
                                   170
               165
Cys Asp Met Ser Pro Leu Leu Val Leu Ala Cys Thr Asp Thr Tyr Phe
                               185
           180
Ile Gly Leu Thr Val Ile Ala Asn Gly Gly Val Asn Cys Ile Val Ile
                            200
                                                205
Phe Thr Leu Leu Gly Ser Tyr Gly Ile Ile Leu Arg Ser Leu Lys
                                            220
                        215
Thr Gln Ser Gln Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ser Ser
                   230
                                        235
His Ile Leu Val Val Ile Leu Phe Phe Val Pro Cys Ile Phe Met Tyr
                                    250
                245
Ala Arg Pro Val Tyr Asn Phe Pro Ile Asp Lys Cys Ile Thr Val Phe
           260
                               265
Tyr Thr Ile Ile Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg
                            280
                                                285
```

```
Asn Ser Glu Ile Lys Ser Cys Met Lys Lys Leu Trp Cys Lys Met Leu
                        295
His Ala Asp
305
<210> 2702
<211> 314
<212> PRT
<213> Unknown (OR5 (423703 444281) Raming-K 93)
<400>2702
Met Thr Glu Arg Asn Gln Thr Val Ile Ser Gln Phe Leu Leu Gly
                                    10
Leu Pro Ile Pro Pro Glu His Gln His Val Gly Tyr Ala Leu Phe Leu
            20
                                25
Ser Met Tyr Leu Thr Thr Ile Leu Gly Asn Leu Ile Ile Ile Leu
                            40
                                                45
Ile Leu Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser
                                            60
Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys
                    70
                                        75
Leu Leu Gln Asn Met Gln Ser Gln Val Pro Ser Ile Pro Tyr Ala Gly
                                    90
Cys Leu Ser Gln Ile Tyr Phe Phe Leu Phe Phe Gly Asp Leu Gly Asn
            100
                                105
Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
                            120
                                                125
Pro Leu His Tyr Met Ser Ile Met Ser Pro Lys Leu Cys Val Ser Leu
                        135
                                            140
Val Val Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His Thr
                   150
                                        155
Leu Leu Met Ala Arg Leu Ser Phe Cys Glu Asp Asn Val Ile Pro His
               165
                                   170
Phe Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp Thr
           180
                               185
Arg Val Asn Glu Val Val Ile Phe Ile Val Val Ser Leu Phe Leu Val
        195
                            200
                                                205
Leu Pro Phe Ala Leu Ile Ile Met Ser Tyr Val Arg Ile Val Ser Ser
                        215
                                            220
Ile Leu Lys Val Pro Ser Ser Gln Gly Ile Tyr Lys Ala Phe Ser Ser
                   230
                                        235
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Val Ile
                245
                                    250
Pro Leu Tyr Leu Cys Pro Ser Ser Asn Asn Ser Thr Val Lys Glu Thr
           260
                                265
Val Met Ser Leu Met Tyr Thr Leu Val Thr Pro Met Leu Asn Pro Phe
                           280
                                               285
Ile Tyr Ser Leu Arg Asn Arg Asp Ile Lys Gly Ala Met Glu Ile Ile
                       295
                                            300
Phe Cys Lys Arg Lys Ile Gln Leu Asn Leu
                   310
<210> 2703
<211> 305
<212> PRT
<213> Unknown (OR37 (423699 S29711 265086) Raming-K 93)
<400>2703
Leu Leu Gly Leu Ser Gly Tyr Pro Lys Thr Glu Ile Leu Tyr Phe
                                    10
Val Ile Val Leu Val Met Tyr Leu Val Ile His Thr Gly Asn Gly Val
```

```
Leu Ile Ile Ala Ser Ile Phe Asp Ser His Leu His Thr Pro Met Tyr
                            40
Phe Phe Leu Gly Asn Leu Ser Phe Leu Asp Ile Cys Tyr Thr Thr Ser
                        55
Ser Val Pro Ser Thr Leu Val Ser Leu Ile Ser Lys Lys Arg Asn Ile
                    70
                                        75
Ser Phe Ser Gly Cys Thr Val Gln Met Phe Val Gly Phe Ala Met Gly
                85
                                    90
Ser Thr Glu Cys Leu Leu Gly Met Met Ala Phe Asp Arg Tyr Val
           100
                               105
Ala Ile Cys Asn Pro Leu Arg Tyr Ser Val Ile Met Ser Lys Glu Val
                           120
Tyr Val Ser Met Ala Ser Ala Ser Trp Phe Ser Gly Gly Ile Asn Ser
                       135
                                           140
Val Val Gln Thr Ser Leu Ala Met Arg Leu Pro Phe Cys Gly Asn Asn
                                       155
                   150
Val Ile Asn His Phe Thr Cys Glu Val Leu Ala Val Leu Lys Leu Ala
                165
                                   170
Cys Ala Asp Ile Ser Leu Asn Ile Val Thr Met Val Ile Ser Asn Met
                                185
                                                    190
Ala Phe Leu Val Leu Pro Leu Leu Leu Ile Phe Phe Ser Tyr Val Leu
                            200
Ile Leu Tyr Thr Ile Leu Arg Met Asn Ser Ala Ser Gly Arg Arg Lys
                        215
                                            220
Ala Phe Ser Thr Cys Ser Ala His Leu Thr Val Val Val Ile Phe Tyr
                    230
                                        235
Gly Thr Ile Phe Ser Met Tyr Ala Lys Pro Lys Ser Gln Asp Leu Thr
                                   250
               245
Gly Lys Asp Lys Phe Gln Thr Ser Asp Lys Ile Ile Ser Leu Phe Tyr
                               265
Gly Val Val Thr Pro Met Leu Asn Pro Ile Ile Tyr Ser Leu Arg Asn
                           280
       275
                                               285
Lys Asp Val Lys Ala Ala Val Lys Tyr Ile Leu Lys Gln Lys Tyr Ile
                       295
Pro
305
<210> 2704
<211> 314
<212> PRT
<213> Unknown (RNOLFRECP (1504112) Raming-K 93)
Met Thr Glu Arg Asn Gln Thr Val Ile Ser Gln Phe Leu Leu Gly
                                   10
Leu Pro Ile Pro Pro Glu His Gln His Val Phe Tyr Ala Leu Phe Leu
          20
                               25
Ser Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Ile Ile Ile Leu
       35
                           40
                                               45
Ile Leu Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser
                       55
                                           60
Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys
                   70
                                       75
Leu Leu Gln Asn Met Gln Ser Gln Val Pro Ser Ile Pro Tyr Ala Gly
               85
                                   90
Cys Leu Ser Gln Ile Tyr Phe Phe Leu Phe Phe Gly Asp Leu Gly Asn
                               105
Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
                           120
                                               125
Pro Leu His Tyr Met Ser Ile Met Ser Pro Lys Leu Cys Val Ser Leu
```

```
135
                                            140
Val Val Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His Thr
                   150
                                       155
Leu Leu Met Ala Arg Leu Ser Phe Cys Glu Asp Asn Val Ile Pro His
               165
                                   170
Phe Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp Thr
                               185
           180
Arg Val Asn Glu Val Val Ile Phe Ile Val Val Ser Leu Phe Leu Val
                           200
Leu Pro Phe Ala Leu Ile Ile Met Ser Tyr Val Arg Ile Val Ser Ser
                       215
Ile Leu Lys Val Pro Ser Ser Gln Gly Ile Tyr Lys Ala Phe Ser Thr
                   230
                                       235
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Val Ile
               245
                                   250
Gly Leu Tyr Leu Cys Pro Ser Ser Asn Asn Ser Thr Val Lys Glu Thr
           260
                               265
                                                   270
Val Met Ser Leu Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                280
        275
                                               285
Ile Tyr Ser Leu Arg Asn Arg Asp Ile Lys Gly Ala Met Glu Arg Ile
                      295
Phe Cys Lys Arg Lys Ile Gln Leu Asn Leu
                    310
<210> 2705
<211> 314
<212> PRT
<213> Unknown (1906335A (444281) Raming-K 93)
<400>2705
Met Thr Glu Arg Asn Gln Thr Val Ile Ser Gln Phe Leu Leu Gly
Leu Pro Ile Pro Pro Glu His Gln His Val Phe Tyr Ala Leu Phe Leu
                               25
Ser Met Tyr Leu Thr Thr Ile Leu Gly Asn Leu Ile Ile Ile Leu
                           40
Ile Leu Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser
                       55
                                           60
Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys
                   70
                                       75
Leu Leu Gln Asn Met Gln Ser Gln Val Pro Ser Ile Pro Tyr Ala Gly
               85
                                   90
Cys Leu Ser Gln Ile Tyr Phe Phe Leu Phe Phe Gly Asp Leu Gly Asn
           100
                               105
Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
                           120
                                               125
Pro Leu His Tyr Met Ser Ile Met Ser Pro Lys Leu Cys Val Ser Leu
                       135
Val Val Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His Thr
                   150
                                       155
Leu Leu Met Ala Arg Leu Ser Phe Cys Glu Asp Asn Val Ile Pro His
               165
                                   170
Phe Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp Thr
           180
                               185
                                                   190
Arg Val Asn Glu Val Val Ile Phe Ile Val Val Ser Leu Phe Leu Val
                           200
                                               205
Leu Pro Phe Ala Leu Ile Ile Met Ser Tyr Val Arg Ile Val Ser Ser
                       215
                                           220
Ile Leu Lys Val Pro Ser Ser Gln Gly Ile Tyr Lys Ala Phe Ser Ser
                  230
                                      235
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Val Ile
```

```
250
               245
Pro Leu Tyr Leu Cys Pro Ser Ser Asn Asn Ser Thr Val Lys Glu Thr
                           265
           260
Val Met Ser Leu Met Tyr Thr Leu Val Thr Pro Met Leu Asn Pro Phe
                       280
                                  285
Ile Tyr Ser Leu Arg Asn Arg Asp Ile Lys Gly Ala Met Glu Ile Ile
            295
Phe Cys Lys Arg Lys Ile Gln Leu Asn Leu
                   310
<210> 2706
<211> 185
<212> PRT
<213> Unknown (PTE01 (544449) Abe-K 93)
<400>2706
Met Tyr Leu Phe Leu Ser Asn Leu Ser Leu Ala Asp Ile Ser Phe Thr
                                 10
Ser Thr Thr Leu Pro Lys Met Ile Val Asp Ile Gln Thr Asn Asn Arg
                              25
Ala Ile Ser Tyr Ser Gly Cys Leu Thr Gln Met Ser Phe Phe Met Leu
                         40
                                          45
Phe Gly Cys Leu Asp Ser Leu Leu Leu Thr Ala Met Ala Tyr Asp Arg
                   55
Phe Val Ala Ile Cys His Pro Leu His Tyr Gln Val Ile Met Asn Pro
                                      75
                   70
Arg Leu Cys Gly Leu Leu Val Phe Leu Ser Ile Leu Ile Ser Leu Leu
                                 90
               85
Val Ser Gln Leu His Asn Ser Val Val Leu Gln Leu Thr Tyr Phe Lys
                              105
Ser Val Asp Ile Ser His Phe Phe Cys Asp Pro Ser Leu Leu Leu Asn
                          120
                                             125
Leu Ala Cys Ser Asp Thr Phe Thr Asn Asn Ile Val Met Tyr Phe Val
                      135
                                         140
Gly Ala Ile Ser Gly Phe Leu Pro Ile Ser Gly Ile Phe Phe Ser Tyr
                                     155
145 150
Tyr Lys Ile Val Ser Ser Ile Leu Arg Met Pro Ser Pro Gly Gly Lys
                                 170
              165
Tyr Lys Ala Phe Ser Thr Cys Gly Ser
                              1.85
           180
<210> 2707
<211> 168
<212> PRT
<213> Unknown (PTE03 (544450) Abe-K 93)
<400>2707
Thr Thr Val Pro Lys Met Leu Ile Asn Leu Gln Lys Gln Asn Lys Ala
                                  10
Ile Ser Tyr Ala Gly Cys Ile Thr Gln Leu Ser Phe Val Leu Leu Phe
                              25
Ala Gly Met Glu Asn Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr
                                              45
       35
                          40
Val Ala Ile Cys Lys Pro Leu Arg Tyr Thr Ala Ile Met Lys Ala His
                       55
                                          60
Leu Cys Leu Val Met Thr Leu Leu Ser Leu Cys Ile Ser Ile Val Asp
                                      75
                   70
Ala Leu Leu His Gly Leu Met Ile Leu Arg Leu Ser Phe Cys Thr Phe
              85
                                 90
                                                      95
Leu Glu Ile Pro His Tyr Phe Cys Glu Leu Tyr Gln Val Ile Lys Leu
                             105
```

```
Ser Cys Ser Asp Thr Leu Ile Asn Asn Ile Leu Val Tyr Thr Met Thr
                                                125
                           120
Ser Thr Leu Gly Gly Val Pro Leu Gly Gly Ile Ile Phe Ser Tyr Phe
                        135
                                           140
Lys Ile Ile Ser Ser Ile Leu Arg Met Pro Ser Ser Gly Ser Arg His
                   150
                                       155
Arg Ala Phe Ser Thr Cys Gly Ser
<210> 2708
<211> 234
<212> PRT
<213> Unknown (PTE33 (544451) Abe-K 93)
Met Tyr Leu Phe Phe Ser Asn Leu Ser Phe Val Asp Ile Tyr Phe Ile
                                    10
Ser Gly Thr Ile Pro Lys Ile Leu Val Asn Met Gln Ser Lys Thr Lys
                                25
Asp Ile Ser Tyr Ile Glu Cys Leu Thr Gln Val Tyr Phe Phe Asn Thr
                                                45
                           40
Phe Val Gly Met Asp Asp Val Leu Arg Thr Leu Met Ala Tyr Asp Arg
                        55
                                            60
Phe Val Ala Ile Cys Met Pro Leu Lys Tyr Thr Val Ile Met Asn Pro
                                        75
                   70
Arg Val Cys Thr Leu Leu Val Leu Met Phe Trp Ile Ile Met Phe Cys
Ile Ser Leu Ile His Val Leu Leu Met Asn Glu Leu Asn Phe Ser Arg
                                105
Gly Thr Lys Ile Pro His Phe Phe Cys Glu Leu Ala Gln Val Leu Lys
                            120
                                                125
Val Ser Asn Ser Asp Thr His Ile Asn Asn Ile Phe Met Tyr Val Leu
                        135
                                            140
Ser Ser Leu Leu Gly Val Ile Pro Met Thr Gly Ile Leu Met Ser Tyr
                                       155 ·
                    150
Ser Gln Ile Val Ser Ser Leu Leu Arg Met Ser Ser Thr Val Ser Lys
               165
                                   170
Tyr Lys Ala Phe Ser Thr Cys Gly Ser His Leu Cys Val Val Cys Leu
                               185
Phe Tyr Gly Ser Val Ile Gly Val Tyr Phe Ser Ser Ser Val Val Leu
                                            205
                           200
Ser Thr Gln Arg Ile Met Val Ala Ser Leu Met Tyr Thr Val Ile Ser
                       215
Pro Met Phe Asn Pro Phe Ile Tyr Ser Leu
                   230
<210> 2709
<211> 234
<212> PRT
<213> Unknown (PTE38 (544452) Abe-K 93)
<400>2709
Met Tyr Leu Phe Phe Ser Asn Leu Ser Phe Asn Asp Ile Cys Ile Ile
                                    10
Thr Thr Ile Pro Lys Met Leu Met Asn Val Gln Ser His Asp Gln
Ser Ile Thr Tyr Leu Gly Cys Leu Ser Gln Val Tyr Leu Ile Val Asn
                            40
Phe Gly Ser Ile Glu Ser Cys Leu Leu Ala Val Met Ala Tyr Asp Arg
                       55
Tyr Val Ala Ile Cys His Pro Leu Lys Tyr Thr Val Ile Met Asn His
```

```
70
Tyr Phe Cys Val Met Leu Leu Leu Phe Ala Cys Ser Leu Ala Leu His
                                  90
Met Cys Leu Phe His Ile Leu Met Val Leu Ile Leu Thr Phe Cys Thr
                              105
Lys Thr Glu Ile Pro His Phe Phe Cys Glu Leu Ala His Ile Ile Lys
                120
                                              125
Leu Thr Cys Ser Asp Asn Phe Ile Asn Tyr Leu Leu Ile Tyr Thr Val
                    135
                                          140
Ser Val Leu Phe Phe Gly Val His Ile Val Gly Ile Ile Leu Ser Tyr
                150
                                      155
Ile Tyr Thr Val Ser Ser Val Leu Arg Met Ser Leu Leu Gly Gly Met
                                   170
               165
Tyr Lys Ala Phe Ser Thr Cys Gly Ser His Leu Ser Val Val Ser Leu
                               185
                                                   190
           180
Phe Tyr Gly Thr Gly Phe Gly Val His Ile Ser Ser Pro Leu Thr Asp
                           200
                                             205
Ser Pro Arg Lys Thr Val Val Ala Ser Val Met Tyr Thr Val Val Thr
                      215
                                           220
Gln Met His Gly Pro Phe Ile Tyr Ser Leu
                   230
<210> 2710
<211> 234
<212> PRT
<213> Unknown (PTE45 (544453) Abe-K 93)
<400>2710
Met Tyr Leu Phe Phe Ser Asn Leu Ser Phe Ala Asp Ile Cys Leu Ile
                                  10
       5
Ser Thr Thr Ile Pro Lys Met Leu Ala Asn Glu His Leu Asn His Lys
                               25
Ala Ile Thr Tyr Glu Gly Cys Ile Met Gln Ile Tyr Phe Phe Thr Leu
                          40
                               -
                                              45
Phe Val Gly Leu Asp Asn Phe Leu Leu Ala Val Met Ala Tyr Asp Arg
                      55
Phe Val Ala Ile Cys His Pro Leu Arg Tyr Thr Ser Ile Met Thr Pro
                                       75
His Leu Cys His Ser Leu Val Leu Val Ser Trp Ile Thr Ser Val Leu
               85
                                  90
Asn Ser Ser Leu Gln Ser Phe Leu Val Leu Gln Leu Ser Phe Cys Thr
                              105
           100
Glu Val Glu Ile Pro His Phe Phe Cys Glu Leu Ser Met Leu Val His
                                              125
                          120
Leu Ala Cys Ser Asp Thr Phe Leu Ser Asp Met Ala Met Asn Val Leu
                       135
Ala Ala Leu Leu Gly Gly Gly Cys Leu Val Gly Ile Leu Tyr Ser Tyr
                   150
                                      155
Ser Lys Ile Val Ser Ser Ile Gln Ala Ile Ser Ser Ala Glu Gly Lys
                                  170
               165
Tyr Lys Ala Phe Ser Thr Cys Val Ser His Leu Ser Val Val Ser Leu
                               185
          180
Phe Tyr Cys Thr Leu Leu Gly Val Tyr Leu Ser Ser Ala Val Thr Gln
      195
                          200
Asn Ser His Ser Thr Ala Ala Thr Ser Leu Met Tyr Thr Val Val Thr
                      215
Pro Met Leu Asn Pro Phe Ile Tyr Phe Phe
                  230
<210> 2711
<211> 232
```

<212> PRT <213> Unknown (PTE58 (544454) Abe-K 93) <400>2711 Leu Leu Met Cys Asn Leu Cys Phe Ala Asp Ile Cys Phe Thr Ser Ala 10 Ser Ile Pro Thr Asn Leu Val Asn Ile Gln Thr Lys Asn Lys Val Ile 20 25 Thr Tyr Glu Gly Cys Ile Ser Gln Val Tyr Phe Phe Ile Leu Phe Gly 40 Val Leu Asp Asn Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val 55 60 Ala Ile Cys His Pro Leu His Tyr Thr Val Ile Met Asn Arg Arg Leu 70 75 Cys Gly Leu Leu Val Leu Gly Ser Trp Val Thr Thr Ala Leu Asn Ser 90 Leu Leu Gln Ser Ser Met Ala Leu Arg Leu Ser Phe Cys Thr Asp Leu 105 Lys Ile Pro His Phe Val Cys Glu Leu Asn Gln Leu Val Leu Leu Ala 120 125 Cys Asn Asp Thr Phe Pro Asn Asp Met Val Met Tyr Phe Ala Ala Val 135 Leu Leu Gly Gly Gly Pro Leu Ala Gly Ile Leu Tyr Ser Tyr Ser Lys 150 155 Ile Val Ser Ser Ile Arg Ala Ile Ser Ser Ser Gln Gly Lys Tyr Lys 165 170 Ala Phe Ser Thr Cys Ala Ser His Leu Ser Val Val Ser Leu Phe Tyr 185 Ser Thr Leu Leu Gly Val Tyr Leu Ser Ser Ser Phe Thr Gln Asn Ser 200 205 His Ser Thr Ala Arg Ala Ser Val Met Tyr Ser Val Val Thr Pro Met 215 Leu Asn Pro Phe Ile Tyr Phe Phe 230 <210> 2712 <211> 312 -<213> Unknown (RATGUST27 (D12820 P34987 A46750) Abe-K 93) <400>2712 Met Ile Leu Asn Cys Asn Pro Phe Ser Gly Leu Phe Leu Ser Met Tyr 10 Leu Val Thr Val Leu Gly Asn Leu Leu Ile Ile Leu Ala Val Ser Ser 25 Asn Ser His Leu His Asn Leu Met Tyr Phe Phe Leu Ser Asn Leu Ser 40 Phe Val Asp Ile Cys Phe Ile Ser Thr Thr Ile Pro Lys Met Leu Val 55 60 Asn Ile His Ser Gln Thr Lys Asp Ile Ser Tyr Ile Glu Cys Leu Ser 70 75 Gln Val Tyr Phe Leu Thr Thr Phe Gly Gly Met Asp Asn Phe Leu Leu 90 Thr Leu Met Ala Cys Asp Arg Tyr Val Ala Ile Cys His Pro Leu Asn 105 Tyr Thr Val Ile Met Asn Leu Gln Leu Cys Ala Leu Leu Ile Leu Met 120 Phe Trp Leu Ile Met Phe Cys Val Ser Leu Ile His Val Leu Leu Met 135 140 Asn Glu Leu Asn Phe Ser Arg Gly Thr Glu Ile Pro His Phe Phe Cys

155

```
Glu Leu Ala Gln Val Leu Lys Val Ala Asn Ser Asp Thr His Ile Asn
                                   170
               165
Asn Val Phe Met Tyr Val Val Thr Ser Leu Leu Gly Leu Ile Pro Met
                              185
Thr Gly Ile Leu Met Ser Tyr Ser Gln Ile Ala Ser Ser Leu Leu Lys
                                              205
                          200
Met Ser Ser Ser Val Ser Lys Tyr Lys Ala Phe Ser Thr Cys Gly Ser
                                          220
                      215
His Leu Cys Val Val Ser Leu Phe Tyr Gly Ser Ala Thr Ile Val Tyr
                                      235
        . 230
Phe Cys Ser Ser Val Leu His Ser Thr His Lys Lys Met Ile Ala Ser
              245
                                   250
Leu Met Tyr Thr Val Ile Ser Pro Met Leu Asn Pro Phe Ile Tyr Ser
                                                  270
                               265
           260
Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Gly Lys Leu Phe Ile Arg
                                              285
                          280
Val Ala Ser Cys Pro Leu Trp Ser Lys Asp Phe Arg Pro Lys Phe Ile
                     295
Leu Lys Pro Glu Arg Gln Ser Leu
                   310
<210> 2713
<211> 222
<212> PRT
<213> Unknown (K7 (MUSODORECA L14566 293754 464305 C40745) Ressler-KJ 93)
<400>2713
Phe Phe Leu Ser His Leu Ala Ile Val Asp Ile Ala Tyr Ala Cys Asn
                                   10
               5
Thr Val Pro Gln Met Leu Val Asn Leu Leu Asp Pro Val Lys Pro Ile
                                                   30
           20
Ser Tyr Ala Gly Cys Met Thr Gln Thr Phe Leu Phe Leu Thr Phe Ala
                           40
                                              45
Ile Thr Glu Cys Leu Leu Val Val Met Ser Tyr Asp Arg Tyr Val
                                           60
50 :
                      55
Ala Ile Cys His Pro Leu Arg Tyr Ser Ala Ile Met Ser Trp Arg Val
65 70
                                       75
Cys Ser Thr Met Ala Val Thr Ser Trp Ile Ile Gly Val Leu Leu Ser
                                  90
Leu Ile His Leu Val Leu Leu Leu Pro Leu Pro Phe Cys Val Ser Gln
                              105
           100
Lys Val Asn His Phe Phe Cys Glu Ile Thr Ala Ile Leu Lys Leu Ala
                          120
                                               125
Cys Ala Asp Thr His Leu Asn Glu Thr Met Val Leu Ala Gly Ala Val
                                           140
                       135
Ser Val Leu Val Gly Pro Phe Ser Ser Ile Val Val Ser Tyr Ala Cys
                                       155
                   150
Ile Leu Gly Ala Ile Leu Lys Ile Gln Ser Glu Glu Gly Gln Arg Lys
               165
                                  170
Ala Phe Ser Thr Cys Ser Ser His Leu Cys Val Val Gly Leu Phe Tyr
                              185
           180
Gly Thr Ala Ile Val Met Tyr Val Gly Pro Arg His Gly Ser Pro Lys
                          200
Glu Gln Lys Lys Tyr Leu Leu Leu Phe His Ser Leu Phe Asn
                       215
<210> 2714
<211> 222
<212> PRT
<213> Unknown (M50 (MUSODORECB L14567 293756 P34986 OLF5) Buck 93)
```

```
<400>2714
 Tyr Phe Leu Ser Thr Met Ser Phe Leu Glu Ala Trp Tyr Ile Ser Val
                                     10
 Thr Val Pro Lys Met Leu Ala Gly Phe Leu Phe His Pro Asn Thr Ile
                                 25
                                                     30
 Ser Phe Leu Gly Cys Met Thr Gln Leu Tyr Phe Phe Met Ser Leu Ala
 Cys Thr Glu Cys Val Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val
                        55
 Ala Ile Cys Trp Pro Leu Arg Tyr Pro Val Met Met Thr Thr Gly Phe
                     70
                                        75
 Cys Val Gln Leu Thr Ile Ser Ser Trp Val Ser Gly Phe Thr Ile Ser
                 85
                                    90
 Met Ala Lys Val Tyr Phe Leu Ser Arg Val Ala Phe Cys Gly Asn Asn
            100
                                105
 Val Leu Asn His Phe Phe Cys Asp Val Ser Pro Ile Leu Lys Leu Ala
                             120
                                                125
 Cys Met Asn Leu Ser Met Ala Glu Thr Val Asp Phe Ala Leu Ala Ile
                        135
                                            140
Val Ile Leu Ile Phe Pro Leu Ser Ala Thr Val Leu Ser Tyr Gly Phe
                    150
                                        155
Ile Val Ser Thr Val Leu Gln Ile Pro Ser Ala Thr Gly Gln Arg Lys
                165
                                    170
                                                         175
Ala Phe Ser Thr Cys Ala Ser His Leu Thr Val Val Val Ile Phe Tyr
            180
                                185
                                                    190
Thr Ala Val Ile Phe Met Tyr Val Arg Pro Arg Ala Ile Ala Ser Phe
                            200
                                                205
Asn Ser Asn Lys Leu Ile Ser Ala Ile Tyr Ala Val Phe Thr
                        215
<210> 2715
<211> 161
<212> PRT
<213> Unknown (K18 (MUSODORECC L14568 293758 B40745) Buck 93)
<400>2715
Arg Tyr Val Ala Ile Cys Lys Pro Leu Thr Tyr Lys Val Ile Met Ser
                                    10
Pro Lys Ile Cys Cys Leu Leu Ile Phe Ser Ser Tyr Leu Met Gly Phe
                                25
Ala Ser Ala Met Ala His Thr Gly Cys Met Ile Arg Leu Ser Phe Cys
                            40
                                                45
Asp Ser Asn Ile Ile Asn His Tyr Met Cys Asp Ile Phe Pro Leu Leu
                        55
Pro Leu Ser Cys Ser Ser Thr Tyr Val Asn Glu Leu Met Ser Ser Val
                 -70
                                        75
Val Val Gly Ser Ala Ile Ile Leu Cys Cys Leu Ile Ile Leu Ile Ser
                85
                                    90
Tyr Ala Met Ile Leu Phe Asn Ile Ile His Met Ser Ser Gly Lys Gly
            100
                                105
Trp Ser Lys Ala Leu Gly Thr Cys Gly Ser His Ile Ile Thr Val Ser
        115
                            120
                                               125
Leu Phe Tyr Gly Ser Gly Leu Leu Ala Tyr Val Lys Pro Ser Ser Ala
                        135
                                            140
Lys Thr Val Gly Gln Gly Lys Phe Phe Ser Val Phe Tyr Thr Leu Leu
145
                    150
Val
```

<210> 2716 <211> 222

```
<212> PRT
<213> Unknown (K4 (MUSODORECD L14569 293760 464303 OLF4 P34983) Ressler-KJ
<400>2716
Tyr Phe Leu Ser Ser Leu Ser Phe Ile Asp Phe Cys Gln Ser Thr Val
                                    10
Val Ile Pro Lys Met Leu Val Ser Phe Leu Thr Glu Met Asn Ile Ile
                                25
            20
Ser Tyr Ser Glu Cys Met Ala Gln Leu Tyr Phe Phe Leu Thr Phe Gly
                            40
Ile Ala Gly Cys Tyr Thr Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val
Ala Ile Cys Asn Pro Leu Leu Tyr Asn Val Thr Met Ser Tyr Gln Ile
                    70
                                        75
Tyr Ser Ser Leu Ile Ser Gly Val Tyr Ile Phe Ala Val Ile Cys Ser
                85
                                    90
Ser Phe Asn Thr Gly Phe Met Leu Arg Thr Gln Phe Cys Asn Leu Asp
            100
                               1.05
Val Ile Asn His Tyr Phe Cys Asp Leu Leu Pro Leu Leu Asn Leu Ala
                           120
Ser Ser Asn Thr Tyr Ile Asn Glu Ile Leu Ile Leu Phe Phe Ala Thr
                       135
                                            140
Leu Asn Ser Phe Val Pro Val Leu Thr Ile Ile Thr Ser Tyr Ile Phe
                                        155
                   150
Ile Ile Val Thr Ile Leu Ser Ile His Ser Arg Glu Gly Lys Phe Lys
               165
                                    170
Ala Phe Ser Thr Cys Ser Thr His Ile Ser Ala Val Ala Ile Phe Tyr
                                185
Gly Ser Gly Ala Phe Thr Tyr Leu Gln Pro Ser Ser Leu Asn Ser Met
                            200
Gly Gln Ala Lys Val Ser Ser Val Phe Tyr Thr Thr Val Val
                        215
<210> 2717
<211> 312
<212> PRT
<213> Unknown (olf3 (MUSOR3X OR3 M84005 200154 P23275 A46247) Nef 92)
<400>2717
Met Glu Val Asp Ser Asn Ser Ser Ser Gly Thr Phe Ile Leu Met Gly
                                    10
Val Ser Asp His Pro His Leu Glu Ile Ile Phe Phe Ala Val Ile Leu
           20
Ala Ser Tyr Leu Leu Thr Leu Val Gly Asn Leu Thr Ile Ile Leu Leu
                            40
Ser Arg Leu Asp Ala Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                        55
                                            60
Asn Leu Ser Ser Leu Asp Leu Ala Phe Thr Thr Ser Ser Val Pro Gln
                                        75
Met Leu Lys Asn Leu Trp Gly Pro Asp Lys Thr Ile Ser Tyr Gly Gly
                                    90
Cys Val Thr Gln Leu Tyr Val Phe Leu Trp Leu Gly Ala Thr Glu Cys
                               105
Ile Leu Leu Val Val Met Ala Phe Asp Arg Tyr Val Ala Val Cys Arg
                           120
                                                125
Pro Leu His Tyr Met Thr Val Met Asn Pro Arg Leu Cys Trp Gly Leu
                       135
                                            140
Ala Ala Ile Ser Trp Leu Gly Gly Leu Gly Asn Ser Val Ile Gln Ser
                   150
                                        155
Thr Phe Thr Leu Gln Leu Pro Phe Cys Gly His Arg Lys Val Asp Asn
```

```
165
                                     170
 Phe Leu Cys Glu Val Pro Ala Met Ile Lys Leu Ala Cys Gly Asp Thr
                                185
 Ser Leu Asn Glu Ala Val Leu Asn Gly Val Cys Thr Phe Phe Thr Val
                            200
 Val Pro Val Ser Val Ile Leu Val Ser Tyr Cys Phe Ile Ala Gln Ala
                        215
                                            220
 Val Met Lys Ile Arg Ser Val Glu Gly Arg Arg Lys Ala Phe Asn Thr
                    230
                                        235
 Cys Val Ser His Leu Val Val Val Phe Leu Phe Tyr Gly Ser Ala Ile
                245
                                    250
 Tyr Gly Tyr Leu Leu Pro Ala Lys Ser Ser Asn Gln Ser Gln Gly Lys
            260
                                265
 Phe Ile Ser Leu Phe Tyr Ser Val Val Thr Pro Met Val Asn Pro Leu
                           280
 Ile Tyr Thr Leu Arg Asn Lys Glu Val Lys Gly Ala Leu Gly Arg Leu
                       295
                                            300
 Leu Gly Lys Gly Arg Gly Ala Ser
                    310
 <210> 2718
 <211> 309
 <212> PRT
<213> Unknown (MMOR23 (X92969))
<400>2718
Met Gln Arg Asn Asn Phe Thr Glu Val Ile Glu Phe Val Phe Leu Gly
                                    10
Phe Ser Ser Phe Gly Lys His Gln Ile Thr Leu Phe Val Val Phe Leu
                                25
Thr Ile Tyr Ile Leu Thr Leu Ala Gly Asn Ile Ile Ile Val Thr Ile
                            40
Thr His Ile Asp His His Leu His Thr Pro Met Tyr Phe Phe Leu Ser
Met Leu Ala Ser Ser Glu Thr Val Tyr Thr Leu Val Ile Val Pro Arg
                    70
                                        75
Met Leu Ser Ser Leu Ile Phe Tyr Asn Leu Pro Ile Ser Leu Ala Gly
                85
                                    90
Cys Ala Thr Gln Met Phe Phe Phe Val Thr Leu Ala Thr Asn Asn Cys
            100
                                105
Phe Leu Leu Thr Ala Met Gly Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                            120
                                                125
Pro Leu Arg Tyr Thr Ile Ile Met Ser Lys Gly Met Cys Ala Leu Leu
                        135
Val Cys Gly Ser Leu Gly Thr Gly Leu Val Met Ala Val Leu His Val
                    150
                                        155
Pro Ala Met Phe His Leu Pro Phe Cys Gly Thr Val Val Glu His Phe
                165
                                    170
Phe Cys Asp Ile Tyr Pro Val Met Lys Leu Ser Cys Val Asp Thr Thr
            180
                                185
Val Asn Glu Ile Ile Asn Tyr Gly Val Ser Ser Phe Val Ile Leu Val
                            200
Pro Ile Gly Leu Ile Phe Ile Ser Tyr Val Leu Ile Val Ser Ser Ile
                        215
                                            220
Leu Lys Ile Val Ser Thr Glu Gly Gln Lys Lys Ala Phe Ala Thr Cys
                   230
                                        235
Ala Ser His Leu Thr Val Val Ile Val His Tyr Gly Cys Ala Ser Ile
                                    250
Ala Tyr Leu Lys Pro Lys Ser Glu Ser Ser Val Glu Lys Asp Leu Leu
                                265
Leu Ser Val Thr Tyr Thr Ile Ile Thr Pro Leu Leu Asn Pro Val Val
```

```
280
Tyr Ser Leu Arg Asn Lys Glu Val Lys Asp Ala Leu Cys Arg Ala Val
                        295
Gly Arg Asn Thr Ser
305
<210> 2719
<211> 332
<212> PRT
<213> Unknown (GGCOR2GEN)
<400>2719
Met Leu Val Leu Cys Phe Ser Ala Ser Leu Leu Ser Asn Cys Asn Cys
                                    10
Val Val Met Met Ala Lys Gly Asn His Ser Ser Ile Thr Glu Phe Val
Leu Leu Gly Phe Ser Glu Lys Arg Ala Ile Gln Ala Val Leu Phe Met
                            40
Gly Phe Leu Leu Ile Tyr Leu Ile Thr Leu Leu Gly Asn Val Gly Met
                       55
Ile Thr Leu Ile Arg Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe
                    70
                                       75
Phe Leu Ser Ser Leu Ser Phe Leu Asp Ile Cys Tyr Ser Ser Thr Ile
                                   90
Thr Pro Arg Val Leu Ser Asp Leu Pro Ala Ser Gln Lys Val Ile Ser
                               105
His Ser Ala Cys Leu Ala Gln Phe Tyr Phe Tyr Ala Val Phe Ala Thr
                                              125
                           120
Thr Glu Cys Tyr Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala
                                          140
                       135
Ile Cys Ser Pro Leu Leu Tyr Val Phe Ser Met Ser Ser Arg Val Cys
                   150
                                       155
Val Leu Leu Val Ala Gly Ser Tyr Leu Val Gly Val Val Asn Ala Thr
                                   170
Ile His Thr Gly Leu Ala Leu Gln Leu Ser Phe Cys Gly Pro Asn Ile
                               185
           180
Ile Asn His Phe Tyr Cys Asp Gly Pro Pro Leu Tyr Ala Ile Ser Cys
                           200
Thr Asp Pro Thr Thr Asn Glu Ile Ala Ile Phe Leu Val Val Gly Phe
                       215
                                           220
Asn Met Leu Ile Thr Ser Val Thr Ile Phe Ile Ser Tyr Thr Tyr Ile
                   230
                                       235
Leu Phe Ala Val Leu Arg Met His Thr Ala Ala Gly Lys Arg Lys Thr
                                   250
               245
Phe Ser Thr Cys Ala Ser His Leu Ala Thr Val Thr Leu Phe Tyr Ala
                               265
           260
Ser Ala Gly Ser Met Tyr Ser Arg Pro Ser Ser Arg His Ser Gln Asp
                           280
                                               285
Leu Asp Lys Val Ala Ser Val Phe Tyr Thr Met Val Thr Pro Met Leu
                                           300
                       295
Asn Pro Leu Ile Tyr Ser Leu Arg Asn Gln Glu Val Lys Asp Val Leu
                  310 ~
                                      315
Gly Lys Val Met Gly Arg Lys Ser Val Ser Asp Lys
                                   330
               325
<210> 2720
<211> 312
<213> Unknown (GGCOR3GEN)
<400>2720
```

```
Met Ala Leu Gly Asn Cys Thr Thr Pro Thr Thr Phe Ile Leu Ser Gly
                  5
                                     10
 Leu Thr Asp Asn Pro Arg Leu Gln Met Pro Leu Phe Met Val Phe Leu
             20
                                 25
 Val Ile Tyr Thr Thr Leu Leu Thr Asn Leu Gly Leu Ile Ala Leu
                             40
 Ile Ser Val Asp Leu His Leu Gln Thr Pro Met Tyr Ile Phe Leu Gln
                         55
                                             60
 Asn Leu Ser Phe Thr Asp Ala Ala Tyr Ser Thr Val Ile Thr Pro Lys
                     70
                                         75
 Met Leu Ala Thr Phe Leu Glu Glu Arg Lys Thr Ile Ser Tyr Val Gly
                                     90
 Cys Ile Leu Gln Tyr Phe Ser Phe Val Leu Leu Thr Thr Ser Glu Cys
             100
                                 105
 Leu Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys
                             120
                                                 125
 Pro Leu Leu Tyr Pro Ser Ile Met Thr Lys Ala Val Cys Trp Arg Leu
                         135
 Val Lys Gly Leu Tyr Phe Leu Ala Phe Leu Asn Ser Leu Val His Thr
                    150
                                        155
 Ser Gly Leu Leu Lys Leu Ser Phe Cys Ser Ser Asn Val Val Asn His
                165
                                    170
 Phe Phe Cys Asp Asn Ser Pro Leu Phe Gln Ile Ser Ser Ser Thr
            180
                                185
                                                    190
Thr Leu Asn Glu Leu Leu Val Ile Ile Phe Gly Ser Leu Phe Val Met
                            200
Ser Ser Ile Ile Thr Ile Leu Ile Ser Tyr Val Phe Ile Ile Leu Thr
                        215
                                            220
Val Val Arg Ile Arg Ser Lys Asp Gly Lys Tyr Lys Ala Phe Ser Thr
                    230
                                        235
Cys Thr Ser His Leu Met Ala Val Ser Leu Phe His Gly Thr Val Ile
                245
                                     250
Phe Met Tyr Leu Arg Ser Val Lys Leu Phe Ser Leu Asp Thr Asp Lys
            260
                                265
Ile Ala Ser Leu Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu
                            280
                                                285
Ile Tyr Ser Trp Arg Asn Lys Glu Val Lys Asp Ala Leu Arg Arg Leu
                        295
Thr Ala Thr Ser Ile Trp Leu His
                    310
<210> 2721
<211> 312
<212> PRT
<213> Unknown (GGCOR4GEN)
<400>2721
Met Ala Glu Gly Asn His Thr Leu Ala Ser Glu Phe Ile Leu Val Gly
                                    10
Leu Ser Asp His Pro Lys Met Lys Ala Ala Leu Phe Val Val Phe Leu
                                25
Leu Ile Tyr Val Ile Thr Phe Gln Gly Asn Leu Gly Ile Ile Ile Leu
                            40
Ile Gln Gly Asp Pro Arg Leu His Thr Ser Met Tyr Phe Phe Leu Ser
                        55
                                            60
Ser Leu Ser Val Val Asp Ile Cys Phe Ser Ser Val Ile Ala Pro Arg
                    70
```

90

Thr Leu Val Asn Phe Leu Ser Glu Arg Arg Thr Ile Ser Phe Thr Gly

Cys Thr Gly Gln Thr Phe Phe Tyr Ile Val Phe Val Thr Thr Glu Cys 105

85

```
Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                           120
Pro Leu Leu Tyr Ser Thr Ile Met Thr Arg Arg Gln Cys Met Gln Leu
                       135
                                           140
Val Val Gly Ser Tyr Ile Gly Gly Ile Leu Asn Ala Ile Ile Gln Thr
                  150
                                      155
Thr Phe Ile Ile Arg Leu Pro Phe Cys Gly Ser Asn Ile Ile Asn His
                                   170
               165
Phe Phe Cys Asp Val Pro Pro Leu Leu Ala Leu Ser Leu Ala Ser Thr
                              185
           180
Tyr Ile Ser Glu Met Ile Leu Phe Ser Leu Ala Gly Ile Ile Glu Leu
                           200
Ser Thr Val Thr Ser Ile Leu Val Ser Tyr Ile Phe Ile Ser Cys Ala
                       215
                                           220
Ile Leu Arg Ile Arg Ser Ala Glu Gly Arg Gln Lys Ala Leu Ser Thr
                   230
                                       235
Cys Ala Ser His Leu Thr Ala Val Thr Leu Leu Tyr Gly Thr Thr Ile
                                   250
               245
Phe Thr Tyr Leu Arg Pro Ser Ser Ser Tyr Ser Leu Asn Thr Asp Lys
          260
                               265
Val Val Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu
                                              285
                          280
Ile Tyr Ser Leu Arg Asn Gln Glu Val Lys Gly Ala Leu Ser Arg Val
                      295
Val Glu Arg Ile Thr Val Arg Val
                   310
```

<210> 2722

<211> 318

<212> PRT

<213> Unknown (GGCOR1)

## <400>2722

Met Ala Ser Gly Asn Cys Thr Thr Pro Thr Thr Phe Ile Leu Ser Gly 10 Leu Thr Asp Asn Pro Gly Leu Gln Met Pro Leu Phe Met Val Phe Leu 25 Ala Ile Tyr Thr Ile Thr Leu Leu Thr Asn Leu Gly Leu Ile Ala Leu 40 Ile Ser Val Asp Leu His Leu Gln Thr Pro Met Tyr Ile Phe Leu Gln 55 60 Asn Leu Ser Phe Thr Asp Ala Ala Tyr Ser Thr Val Ile Thr Pro Lys 70 75 Met Leu Ala Thr Phe Leu Glu Glu Arg Lys Thr Ile Ser Tyr Val Gly 90 Cys Ile Leu Gln Tyr Phe Ser Phe Val Leu Leu Thr Val Thr Glu Ser 100 105 Leu Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys 125 120 Pro Leu Leu Tyr Pro Ser Ile Met Thr Lys Ala Val Cys Trp Arg Leu 135 Val Glu Ser Leu Tyr Phe Leu Ala Phe Leu Asn Ser Leu Val His Thr 150 155 Ser Gly Leu Leu Lys Leu Ser Phe Cys Tyr Ser Asn Val Val Asn His 170 Phe Phe Cys Asp Ile Ser Pro Leu Phe Gln Ile Ser Ser Ser Ile 180 185 Ala Ile Ser Glu Leu Leu Val Ile Ile Ser Gly Ser Leu Phe Val Met 200 205 Ser Ser Ile Ile Ile Leu Ile Ser Tyr Val Phe Ile Ile Leu Thr

Val Val Met Ile Arg Ser Lys Asp Gly Lys Tyr Lys Ala Phe Ser Thr 225 230 235 Cys Thr Ser His Leu Met Ala Val Ser Leu Phe His Gly Thr Val Ile 250 Phe Met Tyr Leu Arg Pro Val Lys Leu Phe Ser Leu Asp Thr Asp Lys 265 Ile Ala Ser Leu Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu 280 Ile Tyr Ser Trp Arg Asn Lys Glu Val Lys Asp Ala Leu Arg Arg Leu 295 Thr Ala Thr Thr Phe Gly Phe Ile Asp Ser Lys Ala Val Gln 310 <210> 2723 <211> 312 <212> PRT <213> Unknown (GGCOR2) Met Ala Ser Gly Asn Cys Thr Thr Pro Thr Thr Phe Ile Leu Ser Gly 10 Leu Thr Asp Asn Pro Arg Leu Gln Met Pro Leu Phe Met Val Phe Leu 25 Val Ile Tyr Thr Thr Thr Leu Leu Thr Asn Leu Gly Leu Ile Ala Leu 45 Ile Gly Met Asp Leu His Leu Gln Thr Pro Met Tyr Ile Phe Leu Gln 55 Asn Leu Ser Phe Thr Asp Ala Ala Tyr Ser Thr Val Ile Thr Pro Lys 70 75 Met Leu Ala Thr Phe Leu Glu Glu Arg Arg Thr Ile Ser Tyr Val Gly 85 90 Cys Ile Leu Gln Tyr Phe Ser Phe Val Leu Leu Thr Thr Ser Glu Trp 105 Leu Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys 115 120 125 Pro Leu Leu Tyr Pro Ser Ile Met Thr Lys Ala Val Cys Trp Arg Leu 135 140 Val Lys Gly Leu Tyr Ser Leu Ala Phe Leu Asn Ser Leu Val His Thr 150 155 Ser Gly Leu Leu Lys Leu Ser Phe Cys Ser Ser Asn Val Val Asn His 165 170 Phe Phe Cys Asp Asn Arg Pro Leu Phe Gln Ile Ser Ser Ser Thr 185 Thr Leu Asn Glu Leu Leu Val Ile Ile Ser Gly Ser Leu Phe Val Met 200 205 Ser Ser Ile Ile Thr Ile Leu Ile Ser Tyr Val Phe Ile Ile Leu Thr 215 220 Val Val Met Ile Arg Ser Lys Asp Gly Lys Tyr Lys Ala Phe Ser Thr. 230 235 Cys Thr Ser His Leu Met Ala Val Ser Leu Phe His Gly Thr Val Ile 245 250 Phe Met Tyr Leu Arg Ser Val Lys Leu Phe Ser Leu Asp Thr Asp Lys 265 Ile Ala Ser Leu Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu 280 285 Ile Tyr Ser Trp Arg Asn Lys Glu Val Lys Asp Ala Leu Arg Arg Leu 295 300 Thr Ala Thr Ser Val Trp Leu His

<210> 2724

```
<211> 318
 <212> PRT
 <213> Unknown (GGCOR3)
Met Ala Ser Gly Asn Cys Thr Thr Pro Thr Thr Phe Ile Leu Ser Gly
                                    10
Leu Thr Asp Asn Pro Gly Leu Gln Met Pro Leu Phe Met Val Phe Leu
            20
                                25
Ala Ile Tyr Thr Ile Thr Leu Leu Thr Asn Leu Gly Leu Ile Arg Leu
                            40
Ile Ser Val Asp Leu His Leu Gln Thr Pro Met Tyr Ile Phe Leu Gln
Asn Leu Ser Phe Thr Asp Ala Ala Tyr Ser Thr Val Ile Thr Pro Lys
                   70
Met Leu Ala Thr Phe Leu Glu Glu Arg Lys Thr Ile Ser Tyr Val Gly
                                   90
Cys Ile Leu Gln Tyr Phe Ser Phe Val Leu Leu Thr Thr Ser Glu Cys
                               105
           100
Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys
                           120
                                               125
Pro Leu Leu Tyr Pro Ala Ile Met Thr Lys Ala Val Cys Trp Arg Leu
                       135
                                           140
Val Glu Ser Leu Tyr Phe Leu Ala Phe Leu Asn Ser Leu Val His Thr
                    150
                                       155
Cys Gly Leu Leu Lys Leu Ser Phe Cys Tyr Ser Asn Val Val Asn His
                                   170
               165
Phe Phe Cys Asp Ile Ser Pro Leu Phe Gln Ile Ser Ser Ser Ile
                               185
Ala Ile Ser Glu Leu Leu Val Ile Ile Ser Gly Ser Leu Phe Val Met
                           200
Ser Ser Ile Ile Ile Leu Ile Ser Tyr Val Phe Ile Ile Leu Thr
                       215
Val Val Met Ile Arg Ser Lys Asp Gly Lys Tyr Lys Ala Phe Ser Thr
        4 230
                                       235
Cys Thr Ser His Leu Met Ala Val Ser Leu Phe His Gly Thr Val Ile
               245
                                   250
Phe Met Tyr Leu Arg Pro Val Lys Leu Phe Ser Leu Asp Thr Asp Lys
           260
                               265
Ile Ala Ser Leu Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu
                           280
Ile Tyr Ser Trp Arg Asn Lys Glu Val Lys Asp Ala Leu Arg Arg Leu
                       295
Thr Ala Thr Thr Phe Gly Phe Ile Asp Ser Lys Ala Val Gln
                   310
<210> 2725
<211> 312
<212> PRT
<213> Unknown (GGCOR4)
<400>2725
Met Ala Ser Gly Asn Cys Thr Thr Pro Thr Thr Phe Ile Leu Ser Gly
                                   10
Leu Thr Asp Asn Pro Gly Leu Gln Met Pro Leu Phe Met Val Phe Leu
```

1667

Ala Ile Tyr Thr Ile Thr Leu Leu Thr Asn Leu Gly Leu Ile Ala Leu

Asn Leu Ser Phe Thr Asp Ala Ala Tyr Ser Thr Val Ile Thr Pro Lys

40 Ile Ser Val Asp Leu His Leu Gln Thr Pro Met Tyr Ile Phe Leu Gln

```
75
Met Leu Ala Thr Phe Leu Glu Glu Arg Lys Thr Ile Ser Tyr Ile Gly
                                   90
Cys Ile Leu Gln Tyr Phe Ser Phe Val Leu Leu Thr Val Thr Glu Ser
                               105
Leu Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys
                           120
Pro Leu Leu Tyr Pro Ser Ile Met Thr Lys Ala Val Cys Trp Arg Leu
                       135
Val Lys Gly Leu Tyr Ser Leu Ala Phe Leu Asn Ser Leu Val His Thr
                   150
                                       155
Ser Gly Leu Leu Lys Leu Ser Phe Cys Ser Ser Asn Val Val Asn His
               165
                                   170
Phe Phe Cys Asp Asn Ser Pro Leu Phe Gln Ile Ser Ser Ser Thr
           180
                               185
Thr Leu Asn Glu Leu Leu Val Phe Ile Phe Gly Ser Leu Phe Ala Met
                           200
Ser Ser Ile Ile Thr Ile Leu Ile Ser Tyr Val Phe Ile Ile Leu Thr
                       215
                                            220
Val Val Arg Ile Arg Ser Lys Asp Gly Lys Tyr Lys Ala Phe Ser Thr
                                       235
                   230
Cys Thr Ser His Leu Met Ala Val Ser Leu Phe His Gly Thr Val Ile
               245
                                   250
Phe Met Tyr Leu Arg Pro Val Lys Leu Phe Ser Leu Asp Thr Asp Lys
                               265
Ile Ala Ser Leu Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu
                           280
Ile Tyr Ser Trp Arg Asn Lys Glu Val Lys Asp Ala Leu Arg Arg Val
                       295
Ile Ala Thr Asn Val Trp Ile His
                   310
```

<210> 2726

<211> 312

<212> PRT

<213> Unknown (GGCOR5)

## <400>2726

Met Ala Leu Gly Asn Cys Thr Thr Pro Thr Thr Phe Ile Leu Ser Gly 5 10 Leu Thr Asp Asn Pro Arg Leu Gln Met Pro Leu Phe Met Val Phe Leu 20 25 Ala Ile Tyr Thr Ile Thr Leu Leu Ala Asn Leu Gly Leu Ile Ala Leu 40 Ile Ser Val Asp Phe His Leu Gln Thr Pro Met Tyr Ile Phe Leu Gln Asn Leu Ser Phe Thr Asp Ala Ala Tyr Ser Thr Val Ile Thr Pro Lys 75 Met Leu Ala Thr Phe Leu Glu Glu Arg Arg Thr Ile Ser Tyr Val Gly 85 90 Cys Ile Leu Gln Tyr Phe Ser Phe Val Leu Leu Thr Ser Ser Glu Cys 100 105 Leu Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys 120 Pro Leu Leu Tyr Pro Ala Ile Met Thr Lys Ala Val Cys Trp Arg Leu 135 140 Val Glu Gly Leu Tyr Ser Leu Ala Phe Leu Asn Ser Leu Val His Thr 150 155 Ser Gly Leu Leu Lys Leu Ser Phe Cys Ser Ser Asn Val Val Asn His 170 Phe Phe Cys Asp Asn Ser Pro Leu Phe Gln Ile Ser Ser Ser Thr

```
180
                               185
Thr Leu Asn Glu Leu Leu Val Phe Ile Phe Gly Ser Trp Phe Ala Met
                        200
Ser Ser Ile Ile Thr Thr Pro Ile Ser Tyr Val Phe Ile Ile Leu Thr
                                           220
                      215
Val Val Arg Ile Arg Ser Lys Asp Gly Lys Tyr Lys Ala Phe Ser Thr
                                       235
                   230
Cys Thr Ser His Leu Met Ala Val Ser Leu Phe His Gly Thr Val Ile
                                   250
Phe Met Tyr Leu Arg Pro Val Lys Leu Phe Ser Leu Asp Thr Asp Lys
                               265
Ile Ala Ser Leu Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu
                                               285
                           280
Ile Tyr Ser Trp Arg Asn Lys Glu Val Lys Asp Ala Leu Arg Arg Val
                    295
Ile Ala Thr Asn Val Trp Ile His
                   310
<210> 2727
<211> 312
<212> PRT
<213> Unknown (GGCOR6)
<400>2727
Met Ala Ser Gly Asn Cys Thr Thr Pro Thr Thr Phe Ile Leu Ser Gly
               5
                            10
Leu Thr Asp Asn Pro Gly Leu Gln Met Pro Leu Phe Met Val Phe Leu
Ala Ile Tyr Thr Ile Thr Leu Leu Thr Asn Leu Gly Leu Ile Ala Leu
        35
                           40
Ile Ser Ile Asp Leu Gln Leu Gln Thr Pro Met Tyr Ile Phe Leu Gln
                       55
Asn Leu Ser Phe Thr Asp Ala Val Tyr Ser Thr Val Ile Thr Pro Lys
                                       75
Met Leu Ala Thr Phe Leu Glu Glu Thr Lys Thr Ile Ser Tyr Val Gly
                                   90
Cys Ile Leu Gln Tyr Phe Ser Phe Val Leu Leu Thr Val Arg Glu Cys
                              105
           100
Leu Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys Lys
                           120
                                               125
Pro Leu Leu Tyr Pro Ala Ile Met Thr Lys Ala Val Cys Trp Arg Leu
                       135
Val Lys Gly Leu Tyr Ser Leu Ala Phe Leu Asn Phe Leu Val His Thr
                   150
                                       155
Ser Gly Leu Leu Lys Leu Ser Phe Cys Ser Ser Asn Val Val Asn His
               165
                                   170
Phe Phe Cys Asp Asn Ser Pro Leu Phe Gln Ile Ser Ser Ser Thr
           180
                               185
Ala Leu Asn Glu Leu Leu Val Phe Ile Phe Gly Ser Leu Phe Val Met
                                               205
                           200
Ser Ser Ile Ile Thr Ile Leu Ile Ser Tyr Val Phe Ile Ile Leu Thr
                       215
                                           220
Val Val Arg Ile Arg Ser Lys Glu Arg Lys Tyr Lys Ala Phe Ser Thr
                                       235
                  230
Cys Thr Ser His Leu Met Ala Val Ser Leu Phe His Gly Thr Ile Val
                                   250
               245
Phe Met Tyr Phe Gln Pro Ala Asn Asn Phe Ser Leu Asp Lys Asp Lys
                               265
Ile Met Ser Leu Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu
                           280
Ile Tyr Ser Trp Arg Asn Lys Glu Val Lys Asp Ala Leu His Arg Ala
```

```
300
 Ile Ala Thr Ala Val Leu Phe His
                    310
<210> 2728
<211> 162
<212> PRT
<213> Unknown (XLORXR1)
<400>2728
Val Ala Val Cys His Pro Leu Leu Tyr Val Phe His Met Ser Gln Lys
                                     10
His Cys Thr Phe Phe Val Ser Ala Ala Trp Ile Ile Gly Phe Leu Asp
            20
                                25
Pro Thr Ser Tyr Val Val Leu Ile Ser Lys Phe Ser Phe Cys Thr Ser
                            40
                                                 45
Asn Ile Ile Asp His Phe Phe Cys Asp Leu Ala Pro Leu Leu Lys Leu
                        55
Ser Cys Ser Asp Thr Phe Gln Ile Glu Val Leu Asn Tyr Val Glu Ser
Ala Leu Val Thr Leu Asn Ser Phe Val Leu Thr Val Ile Ser Tyr Ile
                85
Phe Thr Ile Ser Ala Ile Leu Asn Ile Lys Ser Ala Glu Gly Arg His
           100
                                105
Lys Ala Phe Ser Thr Cys Thr Ser His Leu Thr Cys Val Ile Ile Phe
                            120
                                                125
Tyr Ser Thr Ile Ile Ser Leu Tyr Ile Arg Pro Ile Ser Thr Tyr Ala
                       135
                                            140
Pro Lys Gln Asp Gln Phe Phe Ala Leu Leu Tyr Ile Val Leu Ile Pro
145
                   150
Leu Leu
<210> 2729
<211> 161
<212> PRT
<213> Unknown (XLORXR2)
<400>2729
Val Ala Ile Cys Tyr Pro Leu His Tyr Ala Leu Arg Met Ser Leu Lys
                                    10
His Cys Ala Lys Ile Ile Val Gly Val Trp Val Ala Gly Phe Leu Ala
                                25
Pro Val Ile His Thr Val Leu Met Thr Asn Leu Ser Phe Cys Ser Ser
                            40
Asn His Ile Asn His Phe Leu Cys Asp Leu Thr Pro Val Leu Lys Ile
                        55
Ser Cys Ser Asp Thr Ser Leu Ile Glu Met Ile Thr Tyr Ile Asp Gly
                   70
                                        75
Val Ile Val Ala Phe Ser Thr Phe Thr Ile Thr Ser Val Ser Tyr Val
                                    90
Phe Ile Leu Phe Lys Ile Leu Lys Ile His Ser Ser Gln Gly Lys Lys
            100
                                105
                                                    110
Lys Ala Leu Ser Thr Cys Thr Ser His Leu Thr Cys Val Ile Ile Phe
                            120
                                                125
Tyr Gly Ser Ile Ile Cys Leu Tyr Met Arg Pro Thr Lys Ser Ile Ser
                       135
Pro Asn Gln Asp Val Phe Ala Leu Leu Tyr Ala Val Leu Val Pro Met
                   150
                                        155
Leu
```

```
<210> 2730
<211> 155
<212> PRT
<213> Unknown (XLORXR3)
<400>2730
Val Ala Ile Cys Met Pro Met Leu Tyr Ser Leu Ile Met Lys Lys Ser
                                    10
Ile Cys Ala Leu Leu Ala Ser Val Ser Trp Phe Met Gly Ala Met Asp
            20
                               25
Ser Phe Met Phe Trp Tyr Leu Val Ser Asn Ser Ser Phe Cys Asp His
                            40
Gln Glu Ile Asn His Phe Phe Cys Asp Leu Lys Thr Leu Met Lys Leu
                       5.5
Ser Cys Arg Gly Ala Glu Thr Ile Lys Ile Val Ile Ile Val Ala Ser
                   70
Ala Val Leu Gly Phe Leu Pro Phe Cys Leu Ile Leu Ile Ser Tyr Ala
                                 . 90
Asn Ile Ile Ser Ser Val Ser Lys Ile Arg Thr Ala Ala Gly Lys Leu
                               105
                                                  110
           100
Lys Ile Phe Ser Ser Cys Gly Ser His Leu Thr Val Val Leu Leu Phe
                                               125
                           120
Cys Gly Thr Cys Leu Ser Leu Tyr Met Lys Pro Asp Ser Gly Asn Ser
              135
Gln Glu Asn Glu Glu Leu Leu Ser Leu Leu Tyr
                   150
<210> 2731
<211> 162
<212> PRT
<213> Unknown (XLORXR5)
<400>2731
Val Ala Ile Cys Gln Pro Leu Leu Tyr Ala Val Ile Met Asn Arg Lys
                5
                                   1.0
Val Val Ile Ile Phe Val Val Gly Val Tyr Leu Ser Gly Ile Phe Thr
           20
                               25
Ala Ser Ile His Thr Ala Cys Thr Leu Thr Leu Ser Phe Cys Gly Pro
                           40
Asn Thr Ile Asn His Phe Tyr Cys Asp Ile Pro Pro Leu Met Glu Leu
Ser Cys Ser Asp Thr Tyr Ile His Lys Thr Val Ile Phe Val Val Val
                   70
Phe Cys Leu Gly Leu Phe Asn Val Ala Val Ile Leu Ala Ser Tyr Ser
                                   90
               85
Tyr Ile Phe Phe Thr Ile Ile His Ile Gln Ser Ser Cys Gly Arg His
                               105
Lys Ala Phe Ser Thr Cys Ser Ser His Leu Leu Cys Val Ser Leu Phe
                           120
                                               125
Tyr Gly Thr Val Phe Phe Met Tyr Leu Arg Pro Ala Ser Lys Tyr Ser
                                          140
                      135
Val Ser Gln Asp Lys Val Val Ser Val Phe Tyr Thr Met Val Ile Pro
                  150
                                       155
Met Met
<210> 2732
<211> 163
<212> PRT
<213> Unknown (XLORXR9)
```

```
<400>2732
Leu Ala Ile Cys Phe Pro Leu Asn Tyr Cys Leu Ile Met Ser Gln Ser
                                    10
Leu Arg Cys Arg Leu Val Val Cys Trp Ala Cys Gly Leu Val Asn
                                25
Ser Leu Val Gln Ala Phe Ser Ile Ser His Leu Asp Phe Cys Gly Pro
Asn Val Val Asp His Phe Phe Cys Asp Val Thr Pro Leu Phe Lys Leu
                        55
Ser Cys Ser Asp Thr Arg Val Ser Glu Thr Ile Phe Leu Leu Val Val
                    70
                                        75
Ala Val Ala Gly Met Gly Pro Leu Thr Phe Ile Leu Val Thr Tyr Gly
                85
                                    90
His Ile Ile Leu Ala Ile Thr Arg Ile Thr Ser Ser His Gly Arg Tyr
            100
                                105
                                                    110
Lys Thr Phe Ser Thr Cys Ala Ser His Phe Thr Val Val Ala Leu Tyr
                            120
                                                125
Tyr Gly Ser Gly Ile Phe Ser Tyr Ile Trp Pro Thr Ser Thr Tyr Ala
                        135
                                            140
Met Asn Lys Asp Val Lys Val Val Ala Val Leu Tyr Thr Val Met Thr
                    150
                                        155
Pro Met Leu
<210> 2733
<211> 159
<212> PRT
<213> Unknown (XLORXR13)
<400>2733
Val Ala Ile Ser Lys Pro Leu Arg Tyr Met Thr Ile Met Asn Trp Lys
                                    10
Val Cys Ala Val Leu Gly Val Ala Met Trp Thr Ala Gly Thr Val His
            20
Ser Ile Ser Phe Thr Ser Leu Thr Ile Lys Leu Pro Tyr Cys Gly Pro
                            40
Asp Glu Ile Asp Asn Phe Phe Cys Asp Val Pro Gln Val Ile Glu Leu
                        55
                                            60
Ala Cys Thr Asp Thr Arg Ile Thr Glu Ile Leu Val Val Ser Asn Ser
                                        75
Gly Met Ile Ser Met Val Cys Phe Val Ile Ile Val Val Ser Tyr Ala
               85
                                    90
Val Ile Leu Val Ser Leu Arg Gln Gln Ile Ser Asp Gly Lys Arg Lys
           100
                               105
Ala Leu Ser Thr Cys Ala Ala His Leu Thr Val Val Thr Leu Phe Leu
                            120
                                                125
Gly His Cys Ile Phe Ile Tyr Ser Arg Pro Ser Ile Ser Leu Pro Glu
```

<210> 2734 <211> 162 <212> PRT <213> Unknown (XLORXR17)

<400>2734

Asn Ala Ile Cys Asn Pro Leu Leu Tyr Asn Thr Ile Met Asn Lys Arg 1 5 10 15 Thr Cys Val Ile Leu Ile Val Gly Ser Trp Leu Ile Ala Ser Ile Asn

135

150

Asp Lys Ile Val Ser Ala Phe Phe Thr Ala Val Thr Pro Leu Leu

140

```
20
                                25
Ser Leu Ile His Thr Ile Leu Thr Phe Met Leu Pro Phe Cys Gly Ser
                           40
Asn Ala Ile Asp Ser Phe Phe Cys Asp Met Pro Pro Leu Leu Lys Leu
                       55
                                            60
Ala Cys Thr Asp Thr Leu Val Asn Gln Ile Val Ile Phe Val Thr Gly
                                        75
                    70
Ser Cys Ile Ile Ala Gly Pro Phe Met Leu Thr Val Phe Ser Tyr Val
                                   90
Gln Ile Ile Ser Thr Ile Val Ser Ile Arg Ser Ser Ser Arg Lys Lys
           100
                               105
                                                   110
Lys Ala Phe Ser Thr Cys Thr Ser His Ile Thr Ala Val Val Ile Phe
       115
                           120
                                               125
Tyr Val Pro Ser Ile Cys Ile Tyr Phe Arg Pro Lys Ser Asn Gln Ala
                      135
                                         140
Met Ile Gln Asp Lys Met Ala Thr Val Ile Cys Ala Val Ile Thr Pro
                  150
                                       155
Leu Leu
```

<210> 2735

<211> 223

<212> PRT

<213> Unknown (XLORXR42)

<400>2735

Cys Asn Leu Ser Ser Leu Asp Ile Ala Tyr Thr Ser Val Thr Ala Pro 5 10 Lys Leu Ile His Ile Phe Ala Val Asn Asn His Arg Ile Ser Phe Trp 20 25 Gln Cys Ile Ala Gln Leu Tyr Phe Phe Ile Ala Phe Gly Ser Thr Glu 40 45 Tyr Leu Leu Thr Leu Met Ser Tyr Asp Arg Tyr Val Ala Val Cys 55 Lys Pro Leu His Tyr Arg Val Val Met Ser Pro Met Leu Cys Arg Ala 65 70 75 Gly Ala Ala Gly Thr Trp Ile Gly Gly Leu Leu Ala Ser Ile Pro Thr 85 90 Ala Thr Ala Ala Asn Ile Tyr Tyr Cys Ser Asn Asn Ile Ile Ile 100 105 Asn His Phe Phe Cys Asp Met Met Ala Leu Val Lys Leu Ala Cys Ser 120 Asp Thr Thr Met Thr Arg Ala Val Ile Phe Val Glu Gly Met Leu Ile 135 140 Leu Met Thr Cys Phe Leu Leu Thr Val Ile Ser Tyr Ile Cys Ile Leu 150 155

Ser Thr Ile Val Arg Ile His Ser Ser Gly Gly Lys Phe Lys Ala Phe 165 170 Ser Thr Cys Ala Ser His Leu Ser Val Val Ser Ile Phe Tyr Val Leu 185

Ile Phe Tyr Leu Tyr Leu Lys Pro Lys Ser Glu Ile Ser Leu Ser Gln 200 205

Gly Lys Leu Thr Val Leu Tyr Val Tyr Phe Ile Pro Met Phe 210 215 Ü

<210> 2736

<211> 217

<212> PRT

· i . . . <213> Unknown (XLORXR46)

1 m 1 m 1 m

<400>2736

```
Leu Leu Phe Asp Thr Ile Thr Thr Pro Lys Ile Ile Ala Lys Tyr Trp
                         10
Phe Gly Asp Gly Asn Ile Ser Phe Ser Gly Cys Leu Phe Gln Leu Phe
                               25
Cys Val His Ser Leu Gly Ser Val Asp Ser Phe Ile Leu Met Leu Met
                            40
Ala Ala Asp Arg Tyr Val Ala Ile Leu Gln Pro Leu Arg Tyr Phe Ala
                        55
Ile Ile Thr Lys Lys Leu Thr Ala Ile Phe Cys Ser Cys Phe Trp Val
                   70
Leu Ser Val Val Ile Val Ser Val Met Thr Tyr Met Ile Leu Lys Leu
                                   90
Pro Phe Cys Gly Pro Asn Asn Ile Thr Gly Cys Phe Cys Ser Ser Ser
           100
                               105
Val Ile Phe Pro Leu Ala Cys Thr Asp Val Thr Tyr Val Arg Gln Val
       115
                           120
                                              125
Ser Leu Ile Phe Ala Leu Ser Val Leu Leu Ile Pro Leu Ala Phe Ile
                       135
                                           140
Ile Leu Ser Tyr Ala Leu Ile Val Leu Thr Ile His Ser Met Leu His
                   150
                                       155
Ser Asp Asn Trp Gln Lys Leu Phe Tyr Thr Cys Thr Thr His Leu Leu
               165
                                   170
Val Ile Cys Leu Tyr Tyr Ile Pro Arg Val Phe Val Tyr Leu Ala Asn
                               185
Tyr Val Arg Leu Leu Phe Asn Ala Asp Ile Asn Val Leu Ile Leu Tyr
       195
                           200
Met Tyr Thr Phe Leu Pro His Leu Ala
                       215
<210> 2737
<211> 217
<212> PRT
```

<213> Unknown (XLORXR106)

### <400>2737

Leu Leu Phe Asp Thr Ile Thr Thr Pro Lys Ile Ile Ala Lys Tyr Trp Phe Gly Asp Gly Asn Ile Ser Phe Ser Gly Cys Leu Phe Gln Leu Phe 20 25 Cys Val His Ser Leu Gly Ser Val Asp Ser Phe Ile Leu Met Leu Met · : 35 40 45 Ala Ala Asp Arg Tyr Ile Ala Ile Leu Gln Pro Leu Arg Tyr Phe Ala 55 60 Ile Ile Thr Lys Lys Leu Thr Thr Ile Phe Cys Ser Cys Phe Trp Val 70 75 Leu Ser Val Val Ile Val Ser Val Met Thr Tyr Met Ile Leu Lys Leu 90 Pro Phe Cys Gly Pro Asn Asn Ile Thr Gly Cys Phe Cys Ser Ser Ser 100 105 Val Ile Phe Pro Leu Ala Cys Thr Asp Val Thr Tyr Val Arg Gln Val 120 Ser Leu Ile Phe Ala Leu Ser Val Leu Leu Ile Pro Leu Ala Phe Ile 135 140 Ile Leu Ser Tyr Ala Leu Ile Val Leu Thr Ile His Ser Met Leu His 150 155 Ser Asp Asn Trp Gln Lys Leu Phe Tyr Thr Cys Thr Thr His Leu Leu 165 170 Val Ile Cys Leu Tyr Tyr Ile Pro Arg Val Phe Met Tyr Leu Ala Asn 185 190 Tyr Val Arg Leu Leu Phe Asn Ala Asp Ile Asn Val Leu Ile Leu Tyr

Met Tyr Thr Phe Leu Pro His Leu Ala <210> 2738 <211> 217 <212> PRT <213> Unknown (XLORXR116) <400>2738 Leu Leu Phe Asp Thr Ile Thr Leu Pro Lys Ile Ile Ala Lys Tyr Trp Phe Gly Ala Arg Ser Ile Ser Phe Tyr Gly Cys Ile Phe Gln Leu Phe 20 25 Cys Val His Ser Leu Gly Ser Leu Asp Ser Phe Ile Ile Met Leu Met 40 Ala Ile Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu Arg Tyr His Ser 55 60 Ile Ile Ser Asn Lys Leu Val Thr Leu Leu Cys Tyr Phe Phe Trp Val 75 Leu Ala Ala Leu Ile Gly Ser Ile Val Ala Val Ile Ala Gly Gln Leu 90 Pro Tyr Cys Gly Pro Asn Arg Val Arg Asn Cys Phe Cys Val Asn Ser 100 105 Ala Val Thr Val Leu Ala Cys Val Asp Val Thr Leu Ala Arg Arg Thr 120 125 Val Phe Thr Leu Ala Met Cys Val Leu Leu Pro Leu Ala Phe Ile 135 140 Ile Leu Ser Tyr Ile Leu Ile Ile Arg Val Ile His Ser Ser Thr Asn 150 155 Asn Glu Asn Ser Trp Lys Ala Phe Tyr Thr Cys Thr Thr His Leu Met 170 165 Val Ile Gly Leu Tyr Tyr Ile Pro Arg Val Phe Val Tyr Ser Thr Ser 185 Gln Ile Pro Leu Ile Leu Asp Val Asp Ile Asn Val Leu Leu Cys 200 Leu Tyr Thr Phe Val Pro His Leu Ala 210 215 <210> 2739 <211> 217 <212> PRT <213> Unknown (XLORXR117) Leu Leu Phe Asp Thr Ile Thr Thr Pro Lys Ile Ile Ala Lys Tyr Trp 10 Phe Gly Asp Gly Asn Ile Ser Phe Ser Gly Cys Leu Phe Gln Leu Phe 25 Cys Val His Ser Leu Gly Ser Val Asp Ser Phe Ile Leu Met Leu Met 40 Ala Ala Asp Arg Tyr Ile Ala Ile Leu Gln Pro Leu Arg Tyr Phe Ala 55 Ile Ile Thr Lys Lys Leu Thr Thr Ile Phe Cys Ser Cys Phe Trp Val 70 75 Leu Gly Val Val Ile Val Ser Val Met Thr Tyr Met Ile Leu Lys Leu 90 85 Pro Phe Cys Gly Pro Asn Asn Ile Thr Gly Cys Phe Cys Ser Ser Ser 105 110 Val Ile Phe Pro Leu Ala Cys Thr Asp Val Thr Tyr Val Arg Gln Val 120

Ser Leu Ile Phe Ala Leu Ser Val Leu Leu Ile Pro Leu Ala Phe Ile

```
130
                        135
                                            140
 Ile Leu Ser Tyr Ala Leu Ile Val Leu Thr Ile His Ser Met Leu His
                    150
                                        155
 Ser Asp Asn Trp Gln Lys Pro Phe Tyr Thr Cys Thr Thr His Leu Leu
                165
                                    170
 Val Ile Cys Leu Tyr Tyr Ile Pro Arg Val Phe Met Tyr Leu Ala Asn
            180
                               185
 Tyr Val Arg Leu Leu Phe Asn Ala Asp Ile Asn Val Leu Ile Leu Tyr
                            200
 Met Tyr Thr Phe Leu Pro His Leu Ala
     210
                        215
 <210> 2740
 <211> 222
 <212> PRT
 <213> Unknown (XLORXR171)
 <400>2740
Gln Gln Leu Ser Val Cys Asp Leu Leu Gln Thr Ala Cys Thr Val Pro
                                    10
Leu Leu Trp Thr Ile Ile Asn Asp Gly Thr Thr Ile Ser Val Gly
            20
Gly Cys Ile Thr Gln Phe Tyr Phe Phe Asn Ala Ser Glu Ser Val Glu
                            40
Cys Leu Leu Leu Thr Val Met Ser Phe Asp Arg Tyr Leu Ala Ile Cys
                        55
                                            60
Asn Pro Leu Arg Tyr Thr Ser Leu Met Asn Pro Lys Leu Cys Val Lys
                    70
                                        75
Leu Thr Leu Ile Pro Trp Leu Leu Gly Phe Ser Ile Ile Leu Ile Thr
                                    90
Ala Asn Ala Ile Ala Thr Leu Gln Phe Cys Asn Gln Asn Thr Ile Asn
            100
                                105
His Tyr Phe Cys Asp Tyr Phe Pro Leu Glu Leu Ser Cys Met Asp
                            120
Thr Phe Phe Val Gln Thr Glu Ala Ile Leu Gln Ala Val Pro Val Val
                        135
                                            140
Phe Ile Pro Ile Ile Leu Ile Ile Ile Ser Tyr Val Phe Ile Ile His
                   150
                                       155
Thr Leu Leu Lys Ile Val Ser Thr Thr Gly Arg Gln Lys Ala Phe Ser
                165
                                    170
Thr Cys Ser Ser His Leu Ile Val Val Phe Leu Phe Tyr Gly Ser Leu
            180
                               185
                                                    190
Ile Gly Ile Tyr Val Val Pro Ser Arg Lys Gln Ser Pro Thr Ile Ser
       195
                            200
Lys Val Phe Ser Leu Leu Tyr Thr Val Val Thr Pro Leu Leu
    210
                        215
<210> 2741
<211> 220
<212> PRT
<213> Unknown (XLORXR181)
<400>2741
Gln Gln Leu Ser Leu Ser Asp Leu Leu Gly Ser Thr Asn Ile Val Pro
                                   10
Thr Leu Leu Glu Thr Ile Ile Leu Gly Arg Ala Ser Ile Ser Leu Val
                               25
Asp Cys Ile Thr Gln Phe Asn Val Phe Gly Gly Ser Glu Thr Phe Val
                           40
                                               45
Gly Phe Leu Leu Ala Val Met Ser Asn Asp Arg Tyr Val Ala Ile Cys
                       55
```

```
Ile Pro Leu Arg Tyr Thr Ser Ile Thr Ser Tyr Asn Ile Cys Asn Lys
                    70
                                       75
Leu Ile Leu Val Ser Trp Leu Leu Gly Leu Gly Ala Ile Leu Ile Thr
                                   90
Ala Asn Leu Ile Ala Thr Leu Tyr Phe Cys Asp Gln Asn Ile Ile Asn
           100
                               105
                                                   110
His Phe Phe Cys Asp Phe Phe Pro Leu Leu Gln Leu Ser Cys Ser Asp
                           120
Thr Phe Ile Val Gln Leu Glu Val Ile Leu Leu Ser Ile Pro Val Ile
                       135
Ile Tyr Pro Phe Ile Leu Ile Ile Val Ser Tyr Ile Cys Ile Ala His
                   150
                                       155
Ala Ile Leu Lys Ile Val Ser Asn Thr Gly Arg Gln Lys Ala Phe Ser
               165
                                  170
Thr Cys Ser Ser His Leu Ala Val Val Ser Ile Phe Tyr Gly Ala Leu
                              185
                                                  190
           180
Thr Ala Val Tyr Val Ala Pro Pro Arg Lys Glu Ser Gln Thr Leu Ser
                          200
Lys Val Phe Ser Leu Leu Tyr Thr Val Met Ile Pro
                       215
<210> 2742
<211> 220
<212> PRT
<213> Unknown (XLOR185)
<400>2742
Ser Gln Leu Ser Thr Ser Asp Ile Val Ile Ser Thr Thr Val Cys Pro
                                   10
Asn Leu Leu Tyr Ile Thr Trp Asn Glu Gly Ala Tyr Ile Ser Ile Thr
          20
                              25
Gly Cys Ile Trp Gln Phe Asn Met Phe Ser Val Ser Ser Val Thr Glu
                        40
                                              45
Cys Phe Leu Leu Thr Val Met Ser Tyr Asp Arg Tyr Leu Ala Ile Cys
                       55
Lys Pro Leu His Tyr Ala Ser Ile Met Thr Trp Arg Ser Cys Ile Phe
                   70
                                       75
Leu Val Met Ser Cys Trp Ser Leu Gly Phe Leu Leu Ser Met Ile Val
                                   90
               85
Thr Val Met Ile His Tyr Leu His Phe Cys Gly Pro Tyr Thr Ile Asp
                               105
His Leu Phe Cys Asp Tyr Thr Pro Leu Met Gln Leu Ser Cys Ser Asp
                           120
Thr Thr Ile Leu Lys Met Thr Val Phe Leu Ile Ala Thr Pro Gly Thr
                       135
                                          140
Val Leu Gln Pro Phe Phe Ile Ile Ala Thr Tyr Ile Asn Ile Ile Leu
                  150
                                       155
Asn Ile Leu Arg Ile Ser Ser Ser Ser Lys Arg Gln Lys Ala Phe Ser
              165
                                   170
                                                       175
Thr Cys Ser Ser His Leu Ser Val Val Cys Leu Tyr Tyr Gly Thr Leu
           180
                               185
                                                  190
Ile Ala Thr Tyr Ala Thr Pro Thr Asp Gly Arg Leu Ser Thr Arg Asn
                           200
Lys Leu Leu Ser Leu Ile Tyr Thr Val Gly Thr Pro
                      215
<210> 2743
<211> 222
```

<212> PRT

<213> Unknown (XLORXR206)

<400>2743 Gly Asn Leu Ser Phe Val Asp Ile Ser Phe Ile Ser Val Thr Val Pro 10 Leu Met Val Ala His Leu Leu Thr Asp Lys Lys Ser Ile Ser Phe Thr 25 Gly Cys Met Thr Gln Leu Phe Phe Phe Ile Trp Ile Ala Val Leu Glu 40 45 Cys Leu Ile Leu Thr Ile Met Ala Tyr Asp Arg Leu Val Ala Ile Thr 55 Asn Pro Leu Arg Tyr Leu Ser Ile Leu Asp Arg Lys Thr Cys Trp Ser 70 75 Leu Ile Thr Phe Ser Trp Ile Leu Ser Phe Leu His Ser Leu Leu Tyr 85 90 Ala Ser Thr Ile Ser Ser Leu Asp Tyr Cys Gly Leu Asn Lys Val Asn 105 110 Glu His Phe Cys Asp Ile Pro Pro Leu Leu Ala Leu Ser Cys Ser Asn 120 125 Pro Ala Ser Leu Glu Leu Leu Val Tyr Thr Glu Gly Ser Val Met Ala Met Ser Pro Phe Val Leu Ile Met Val Ser Tyr Leu Arg Ile Ile Lys 150 155 Thr Ile Leu Ser Ile His Ser Ser Ser Gly Arg Tyr Arg Ala Phe Ser 165 170 Thr Cys Ser Ser His Leu Ile Ser Val Gly Leu Phe Phe Val Thr Ile 180 185 190 Phe Val Ser Tyr Leu Gln Pro Ala Ser Ala Gly Ala Val Glu Thr Asn 195 200 Arg Pro Ile Ala Leu Val Tyr Ser Ile Leu Thr Pro Leu Pro 210 215 <210> 2744 <211> 222 <212> PRT <213> Unknown (XLORXR214) <400>2744 Ser Asn Met Ser Phe Leu Glu Ile Arg Tyr Ile Ser Val Thr Leu Pro 10 Asn Leu Leu Val Asn Thr Leu Ser Lys Asp Met Ser Ile Ser Leu Ala 25 Gly Cys Met Ala Gln Leu Tyr Phe Phe Ile Ser Leu Met Cys Thr Glu 40 45 Cys Val Leu Leu Ala Val Met Ala Phe Asp Arg Tyr Ile Ala Val Cys His Pro Leu His Tyr Val Thr Ile Val Ser Asn Lys Leu Cys Ile Gln 70 Leu Ala Ala Ala Ser Trp Ile Ala Gly Phe Thr Val Ser Val Ile Lys 90 Val Tyr Phe Ile Ser Arg Leu Ser Phe Cys Gly Pro Asn Ile Ile Asn 105 His Phe Phe Cys Asp Ile Ser Pro Val Leu Asn Leu Ala Cys Val Asp 120 125

Met Ser Leu Ala Glu Phe Val Asp Phe Val Leu Ala Leu Val Ile Leu

Leu Thr Pro Leu Phe Val Thr Val Ala Ser Tyr Leu Cys Ile Ile Phe

Thr Ile Leu Lys Ile Pro Thr Asn Thr Gly Arg Gln Lys Ala Phe Ser

Thr Cys Ala Ser His Leu Thr Val Val Thr Ile Phe Phe Ser Thr Thr

Leu Phe Met Tyr Ala Arg Pro Lys Lys Ala Lys Ser Leu Asp Tyr Phe

185

135

150

165

180

170

155

190

```
205
                         200
       195
Lys Ile Leu Ser Leu Leu Tyr Ala Val Phe Thr Pro Met Leu
                     215
<210> 2745
<211> 312
<212> PRT
<213> Unknown (HOR5beta3)
<400>2745
Met Trp Pro Asn Ile Thr Ala Ala Pro Phe Leu Leu Thr Gly Phe Pro
                                 10
               5
1
Gly Leu Glu Ala Ala His His Trp Ile Ser Ile Pro Phe Phe Ala Val
                . 25
    20
Tyr Val Cys Ile Leu Leu Gly Asn Gly Met Leu Leu Tyr Leu Ile Lys
                                            45
                          40
   35
His Asp His Ser Leu His Glu Pro Met Tyr Tyr Phe Leu Thr Met Leu
                                        60
                      55
Ala Gly Thr Asp Leu Met Val Thr Leu Thr Thr Met Pro Thr Val Met
                                     75
                  70
Gly Ile Leu Trp Val Asn His Arg Glu Ile Ser Ser Val Gly Cys Phe
                                                    95
                                  90
             85
Leu Gln Ala Tyr Phe Ile His Ser Leu Ser Val Val Glu Ser Gly Ser
                              105
           100
Leu Leu Ala Met Ala Tyr Asp Arg Phe Ile Ala Ile Arg Asn Pro Leu
                                            125
                          120
       115
Arg Tyr Ala Ser Ile Phe Thr Asn Thr Arg Val Ile Ala Leu Gly Val
                                        140
               135
  130
Gly Val Phe Leu Arg Gly Phe Val Ser Ile Leu Pro Val Ile Leu Arg
                                    155
        150
Leu Phe Ser Phe Ser Tyr Cys Lys Ser His Val Ile Thr Arg Ala Phe
                                                     175
                    170
              165
Cys Leu His Gln Glu Ile Met Arg Leu Ala Cys Ala Asp Ile Thr Phe
                                                190
    180
                              185
Asn Arg Leu Tyr Pro Val Ile Leu Ile Ser Leu Thr Ile Phe Leu Asp
                                             205
      195
                          200
Ser Leu Ile Ile Leu Phe Ser Tyr Ile Leu Ile Leu Asn Thr Val Ile
                                         220
                      215
Gly Ile Ala Ser Gly Glu Glu Arg Ala Lys Ala Leu Asn Thr Cys Ile
                                     235
                  230
Ser His Ile Ser Cys Val Leu Ile Phe Tyr Val Thr Val Met Gly Leu
                                                     255
                                 250
              245
Thr Phe Ile Tyr Arg Phe Gly Lys Asn Val Pro Glu Val Val His Ile
                              265
                                                 270
           260
Ile Met Ser Tyr Ile Tyr Phe Leu Phe Pro Pro Leu Met Asn Pro Val
                                            285
                          280
Ile Tyr Ser Ile Lys Thr Lys Gln Ile Gln Tyr Gly Ile Ile Arg Leu
                                        300
                     295
Leu Ser Lys His Arg Phe Ser Arg
                  310
<210> 2746
<211> 310
<213> Unknown (HOR5beta2 (translated via ORDEAL))
<220>
<221> VARIANT
<222> (1)...(310)
<223> Xaa = Any Amino Acid
```

<400>2746 Thr His Asn Ala Ala Pro Phe Leu Leu Pro Gly Phe Ser Val Leu Glu 10 Ala Thr Tyr His Ser Ile Ser Ile Pro Phe Phe Ala Val Tyr Val Cys 25 Val Leu Leu Gly Asn Gly Lys Leu Leu Tyr Leu Ile Lys His Asp His 40 Ser Leu His Glu Pro Met Tyr Cys Phe Leu Ala Thr Leu Arg Gln Asp Leu Met Val Lys Leu Thr Met Met Pro Thr Val Met Gly Val Leu Trp 70 75 Met Asn His Lys Glu Val Ile His Gly Ala Cys Phe Leu Gln Val Tyr 90 Ile Ile His Ser His Tyr Pro Leu Ala Glu Ser Gly Ile Leu Leu Ser 100 105 Met Ala Tyr Asp Arg Phe Ile Ile Ile His Met Leu Leu Arg Tyr Asn 125 120 Ser Ile Ser Thr Lys Ser Trp Val Lys Ile Glu Leu Trp Leu Phe Met 135 140 Arg Asp Phe Leu Ser Leu Val Pro Pro Ile Leu Pro Leu His Cys Phe 150 155 Pro Tyr Cys His Ser His Val Leu Phe His Thr Phe Phe Leu His Gln 165 170 Asp Val Leu Lys Leu Ala Cys Ala Asp Ile Thr Phe Asn His Leu Tyr 185 190 Pro Ala Ile Leu Val Ala Leu Ile Phe Phe Leu Asp Ala Leu Ile Ile 200 205 Val Phe Ser Tyr Ile Leu Ile Leu Lys Thr Val Ile Gly Ile Ala Ser 215 220 Arg Lys Glu Gln Ala Lys Ala Leu Asn Met Cys Val Ser His Ile Ser 230 235 Cys Val Leu Val Phe His Ile Thr Val Ile Ser Glu Thr Phe Ile His 250 Arg Phe Gly Lys His Ala Pro His Val Val His Ile Thr Val Ser Xaa 265 270 Xaa Leu Ile Leu Phe Pro Pro Phe Met Asn Pro Ile Ile Tyr Ser Ile 285 280 Lys Pro Ser Arg Ser Lys Glu Ala Leu Xaa Arg Leu Phe Ser Gly His 295 Arg Met Ala Xaa Ala Leu <210> 2747 <211> 310 <212> PRT <213> Unknown (HOR5beta1) <400>2747 Met Trp Tyr Asn Asn Ser Ala Gly Pro Phe Leu Leu Thr Gly Phe Leu 10 Gly Ser Glu Ala Val His Tyr Arg Ile Ser Met Ser Phe Phe Val Ile 20 25 Tyr Phe Ser Val Leu Phe Gly Asn Gly Thr Leu Leu Val Leu Ile Trp 40 Asn Asp His Ser Leu His Glu Pro Met Tyr Tyr Phe Leu Ala Met Leu 55 Ala Asp Thr Asp Leu Gly Met Thr Phe Thr Thr Met Pro Thr Val Leu Gly Val Leu Leu Asp Gln Arg Glu Ile Ala His Ala Ala Cys Phe 90

Thr Gln Ser Phe Ile His Ser Leu Ala Ile Val Glu Ser Gly Ile Leu

			100					105					110		
Leu	Val	Leu 115		Tyr	Asp	Суѕ	Phe 120		Ala	Ile	Arg	Thr 125	Pro	Leu	Arg
Tyr	Asn 130	_	Ile	Leu	Thr	Asn 135	Ser	Arg	Val	Met	Asn 140	Ile	Gly	Leu	Gly
Val 145	Leu	Met	Arg	Gly	Phe 150	Met	Ser	Ile	Leu	Pro 155	Ile	Ile	Leu	Ser	Leu 160
Tyr	Cys	Tyr	Pro	Tyr 165	Cys	Gly	Ser	Arg	Ala 170	Leu	Leu	His	Thr	Phe 175	Cys
Leu	His	Gln	Asp 180	Val	Ile	Lys	Leu	Ala 185	Суѕ	Ala	Asp	Ile	Thr 190	Phe	Asn
His	Ile	Tyr 195	Pro	Ile	Ile	Gln	Thr 200	Ser	Leu	Thr	Val	Phe 205	Leu	Asp	Ala
Leu	Ile 210	Ile	Ile	Phe	Ser	Tyr 215	Ile	Leu	Ile	Leu	Lys 220	Thr	Val	Met	Gly
Ile 225	Ala	Ser	Gly	Gln	Glu 230	Glu	Ala	Lys	Ser	Leu 235	Asn	Thr	Cys	Val	Ser 240
His	Ile	Ser	Cys	Val 245	Leu	Val	Phe	His	Ile 250	Thr	Val	Met	Gly	Leu 255	Ser
Phe	Ile	His	Arg 260	Phe	Gly	Lys	His	Ala 265	Pro	His	Val	Val	Pro 270	Ile	Thr
Met	Ser	Tyr 275	Val	His	Phe	Leu	Phe 280	Pro	Pro	Phe	Val	Asn 285	Pro	Ile	Ile
Tyr	Ser 290	Ile	Lys	Thr	Lys	Gln 295	Ile	Gln	Arg	Ser	Ile 300	Ile	Arg	Leu	Phe
Ser 305	Gly	Gln	Ser	Arg	Ala 310										

				•
				•
			\\	
				:
•				
<b>.</b>				
			i.	
	**			ì

## (19) World Intellectual Property Organization International Bureau



# 

### (43) International Publication Date 19 April 2001 (19.04.2001)

PCT

English

English

## (10) International Publication Number WO 01/027158 A3

C12N 15/12, (51) International Patent Classification7: C07K 14/705, C12N 5/10, G01N 33/50, C12Q 1/68

Street, 75751 Rishon LeZion (IL). YANAI, Itai [US/US]; 55 Leicester Street, Brookline, MA 02146 (US).

(21) International Application Number: PCT/US00/27582

(74) Agents: CERPA, Robert, K. et al.; Morrison & Foerster LLP, 755 Page Mill Road, Palo Alto, CA 94304-1018 (US).

(22) International Filing Date: 6 October 2000 (06.10.2000)

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,

(25) Filing Language:

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(26) Publication Language:

24 February 2000 (24.02.2000)

8 October 1999 (08.10.1999)

#### Published:

land, CA 94612 (US). YEDA RESEARCH AND DE-VELOPMENT CO., LTD. [IL/IL]; Weizmann Institute of Science, P.O. Box 95, 76100 Rehovot (IL).

(71) Applicants (for all designated States except US): DIGIS-

CENTS [US/US]; Suite 720, 1814 Franklin Street, Oak-

with international search report

(72) Inventors; and

(30) Priority Data:

60/158,615

60/184,809

(88) Date of publication of the international search report: 26 September 2002

(75) Inventors/Applicants (for US only): BELLENSON, Joel [US/US]; 244 Lakeside Drive, Apartment 15, Oakland, CA 94612 (US). SMITH, Dexster [US/US]; 868 Trestle Glen Road, Oakland, CA 94610 (US). LANCET, Doron [IL/IL]; 15 Weizmann Street, 76280 Rehovot (IL). GLUS-MAN, Gustavo [IL/IL]; 33/37 Ha'Alon Street, 79845 Bnei Ayish (IL). FUCHS, Tania [IL/IL]; 12 Harav neria

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: OLFACTORY RECEPTOR SEQUENCES

(57) Abstract: The present invention provides polynucleotide sequences which encode polypeptides involved in olfactory sensation. The present invention also provides the polypeptides encoded by these polynucleotide sequences, vectors comprising these polynucleotide sequences and host cells transfected with these polynucleotide sequences. The present invention further provides for functional variants and homologues of these polynucleotide sequences and the polypeptides encoded by these polynucleotides. Libraries of polypeptides are also provided. Also included in the present invention is the use of these polypeptides and libraries of polypeptides in screening odorant molecules to determine the correspondence (scent representation, scent fingerprint or scent profile) between individual odorant receptors (the polypeptides) and particular odorant molecules. Also encompassed by the present invention is the use of the scent representation, scent fingerprint or scent profile to re-create and edit scents.

Into Jional Application No PC1/US 00/27582

A. CLASS IPC 7	C12N15/12 C07K14/705 C12N5	/10 G01N33/50	C12Q1/68						
According to International Patent Classification (IPC) or to both national classification and IPC									
B. FIELDS	SEARCHED								
	ocumentation searched (classification system followed by classific	ation symbols)							
	ition searched other than minimum documentation to the extent that								
Electronic data base consulted during the international search (name of data base and, where practical, search terms used)  EPO-Internal, BIOSIS, SEQUENCE SEARCH, WPI Data, PAJ									
C. DOCUM	ENTS CONSIDERED TO BE RELEVANT								
Category °	Citation of document, with indication, where appropriate, of the r	elevant passages	Relevant to claim No.						
A	and sensitivity of a human olfactory receptor functionally expressed in human embryonic kidney 293 cells and Xenopus laevis oocytes."  JOURNAL OF NEUROSCIENCE, vol. 19, no. 17, pages 7426-7433, XP002178954  ISSN: 0270-6474  cited in the application the whole document								
		-/							
X Furth	er documents are listed in the continuation of box C.	X Patent family members are	e listed in annex.						
*A" document defining the general state of the art which is not cited to understand the principle or theory underlying the									
"E" earlier document but published on or after the international "X" document of particular relevance: the claimed invention									
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone invention cannot be considered to involve an invention cannot be considered to involve an invention to cannot be considered to involve an invention cannot be considered to involve an invention to cannot be considered novel or cannot be considered to involve an invention to cannot be considered novel or cannot be considered to involve an invention to cannot be considered novel or cannot be considered to involve an invention to cannot be considered novel or cannot be considered to involve an invention to cannot be considered novel or cannot be considered to involve an invention to cannot be considered novel or cannot be considered to involve an invention to cannot be considered novel or cannot be considered to involve an invention to cannot be considered novel or cannot be considered novel or cannot be considered to involve an invention cannot be considered novel or cannot be conside									
"O" document referring to an oral disclosure, use, exhibition or other means document is combined with one or more other such document, such combination being obvious to a person skilled in the art.  "P" document published prior to the international filing date but later than the priority date claimed "8" document member of the same patent family									
Date of the actual completion of the international search  Date of mailing of the international search									
	October 2001	<b>1</b> 5, 01, 02							
Name and m	ailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2	Authorized officer							
	Nt 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Holtorf, S							

Form PCT/ISA/210 (second sheet) (July 1992)

In tional Application No
PCT/US 00/27582

	·	PC1/03 00/2/362
C.(Continua	tion) DOCUMENTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	GLUSMAN GUSTAVO ET AL: "Sequence analysis in the olfactory receptor gene cluster on human chromosome 17: Recombinatorial events affecting receptor diversity." GENOMICS, vol. 37, no. 2, 1996, pages 147-160, XP002178955 ISSN: 0888-7543 the whole document & DATABASE EMBL SEQUENCE LIBRARY [Online] 22 July 1994 (1994-07-22) CROWE M.L., PERRY B.N., CONNERTON I.F.: "olfactory receptor; OR17-40 gene"	
	abstract	
Α	BUETTNER JILL A ET AL: "Organization and evolution of olfactory receptor genes on human chromosome 11." GENOMICS, vol. 53, no. 1, 1 October 1998 (1998-10-01), pages 56-68, XP002178956 ISSN: 0888-7543 the whole document	
4	TRASK B J ET AL: "Members of the olfactory receptor gene family are contained in large blocks of DNA duplicated polymorphically near the ends of human chromosomes" HUMAN MOLECULAR GENETICS, OXFORD UNIVERSITY PRESS, SURREY, GB, vol. 7, no. 1, January 1998 (1998-01), pages 13-26, XP002135641 ISSN: 0964-6906 the whole document	
•	& DATABASE EMBL SEQUENCE LIBRARY [Online] 9 June 1996 (1996-06-09) TRASK, B.J., ET AL.: "Homo sapiens chromosome-19 36.3-kbp cosmid F7501, with 3 regions of similarity to olfactory receptor protein genes" accession no. L78442	
	KRAUTWURST D ET AL: "Identification of ligands for olfactory receptors by functional expression of a receptor library" CELL, CELL PRESS, CAMBRIDGE, NA, US, vol. 95, 25 June 1998 (1998-06-25), pages 917-926, XP002153217 ISSN: 0092-8674 cited in the application -/	
m DCT/ISA/21		<u> </u>

Intermional Application No PCT/US 00/27582

		PC1/05 00/2/582
C.(Continua	tion) DOCUMENTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Α	WO 98 50081 A (ZHAO HAIQING ;FIRESTEIN STUART J (US)) 12 November 1998 (1998-11-12) cited in the application	
P,X	DATABASE EMBL SEQUENCE LIBRARY [Online] 14 June 2000 (2000-06-14) HEILIG R., ET AL.: "Human chromosome 14 DNA sequence BAC R-55G7 of library RPCI-11 from chromosome 14 of Homo sapiens (Human)" XP002178959 accession no. AL359218	1,4
T	GLUSMAN GUSTAVO ET AL: "Sequence, structure, and evolution of a complete human olfactory receptor gene cluster." GENOMICS., vol. 63, no. 2, 15 January 2000 (2000-01-15), pages 227-245, XP002178957 ISSN: 0888-7543 the whole document	
T	FUCHS TANIA ET AL: "The human olfactory subgenome: From sequence to structure and evolution." HUMAN GENETICS, vol. 108, no. 1, January 2001 (2001-01), pages 1-13, XP002178958 ISSN: 0340-6717	·
-		
\$ <u>.</u> \$		
<i>:</i>		
:		

rnational application No. PCT/US 00/27582

Box I Observations where certain claims w r found unsearchable (Continuation of item 1 of first sheet)
This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
1. Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
2. Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)
This International Searching Authority found multiple inventions in this international application, as follows:
see additional sheet
As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:  Claims 1-7, 15-19 partially.
Remark on Protest  The additional search fees were accompanied by the applicant's protest.  No protest accompanied the payment of additional search fees.

Form PCT/ISA/210 (continuation of first sheet (1)) (July 1998)

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

### 1. Claim: 1

Invention 1:

claims 1-7, 15-19 partially

Isolated nucleotide sequence encoding an olfactory receptor as characterized by SEQID1; the recombinant expression of the same in host cells; the translated polypeptide sequence of SEQID1 and a host cell and phage expressing said polypeptide; furthermore, a library of olfactory receptors suitable of determining the interaction pattern of a composition with said receptors comprising the translated expression products of at least two, 50, 100, 200 or 500 polynucleotides encoding olfactory receptors, one of which is characterized by SEQID1.

### 2. Claim: 2

Invention 2-115:

claims 1-7, 15-19 partially

As invention one but as characterized by SEQIDs 2-73 and 111-152.

### 3. Claim: 3

Invention 116-1047:

claims 8-10 and 15-19 partially, 31,32,33 completely

Isolated nucleotide sequence encoding an olfactory receptor as characterized by one of the SEQIDs from the group of SEQID153 to SEQID1084; the recombinant expression of the same in a host cell;

furthermore, a library of olfactory receptors suitable of determining the interaction pattern of a composition with said receptors comprising the translated expression products of at least two, 50, 100, 200 or 500 polynucleotides encoding olfactory receptors, one of which is characterized by one of the SEQIDs from the group of SEQID153 to SEQID1084;

furthermore, a DNA array or a DNA chip comprising a DNA segment derived from one SEQID of the group of SEID153 to SEQID1084, a method determining the differences among individuals with respect to their olfactory faculties.

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

comprising comparing the olfactory DNA of the individual against said DNA array or chip; method to determine a single nucleotide polymorphism in olfactory receptors based on primers designed according to the first and last 25 bases of one of the SEQIDs of the group of SEQID153 to SEQId1084.

### 4. Claim: 4

Invention 1048-1971:

claims 11-14,20-24,25-30 partially

Isolated olfactory receptor polypeptide as characterized by one of the SEQIDs from the group of SEQID1085 to SEQID2008; a recombinant host cell or phage expressing said polypeptide; furthermore, a library of olfactory receptors suitable of determining the interaction pattern of a composition with said receptors comprising at least two, 50, 100, 200 or 500 olfactory receptor polypeptides, one of which is characterized by one of the SEQIDs from the group of SEQID1085 to SEQID2008; furthermore, a method for determining the binding pattern of a composition with olfactory receptors, comprising exposing said library to a composition, further determining whether the receptor is activated.

nformation on patent family members

Interional Application No PCT/US 00/27582

	Patent document cited in search report		Publication date		Patent family member(s)	Publication date
	WO 9518140	A	06-07-1995	WO	9518140 A1	06-07-1995
	WO 9850081	A	12-11-1998	US AU EP US WO	5993778 A 7372898 A 0983506 A2 6218358 B1 9850081 A2	30-11-1999 27-11-1998 08-03-2000 17-04-2001 12-11-1998
1						

Form PCT/ISA/210 (patent family annex) (July 1992)